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DECEMBER, 1903.

EDITORIAL NOTES.

The official Register and Directory of Physicians of California has been published by the State Society. It is sent free to members of component societies only. The price to non-members is \$2.50, and copies may be had, while the edition lasts, by application to the publication office of the Society, 31 Post Street, San Francisco, California. In distributing the Register to members, the Trustees have decided to send to the secretary of each component society the number of copies required for his society, requesting the secretaries to see that members receive them. If you have not received your copy of the Register by the 15th of December, write to your county society secretary and ask him why. Remember that it will take a little time to get all these books distributed, so wait till the 15th before you make complaint. Please remember that no copies will be given free, except to members and exchanges, and that if you lose or destroy your copy you will have to pay \$2.50 for another. Owing to the rapid increase in membership of almost all component societies, many names of members who have become such recently are not printed in black face type. These additions are being noted and future editions of the Register will be corrected in this respect. If you are a member of a component society and your name is not printed in black type, please let us know, but do not blame us, for we are not responsible. We hope you will like the Register, and that you will read carefully pages 15, 23 and 25.

On November 17th, the Hon. Frank J. Murasky, of the Superior Court, handed down a very important decision in the suits

**SUITS AGAINST
THE EXAMINERS.**

pending before him against the Board of Medical Examiners of this state. These suits involved various phases of the constitutionality of the act regulating the practice of medicine in California, under which act the Board of Examiners derive authority. The suits were brought by Von Tiedeman, Gardina and Herbin, all of whom were practicing illegally; the two last named had been rejected by the Board of Examiners. The decision handed down by Judge Murasky is very emphatic in affirming the absolute constitutionality of those portions of the law in question, and the suits against the Board were simply thrown out. Another suit, that of Gerino, has been taken before the Supreme Court of California on a writ of *habeas corpus*, and as such cases are disposed of as promptly as possible, this suit will probably be decided very shortly, after argument before the Court in bank; December 7th has been set for the hearing. This suit involves the constitutionality of another element of the law, and of course the decision of this Court will be final. The only other suit of importance remaining is that of Hodhead, representing a medical school, in which the constitutional right of the State Medical Societies to appoint or elect members of the Board, as authorized by the State Legislature when it enacted the law, is questioned. The contention is one that has been raised and decided elsewhere, and probably the constitutionality of the law in this, as in all the other points, will be affirmed. It begins to look as though all these legal difficulties will be cleared away before the first of the year, and that 1904 will commence with a well-cleared-up and defined law.

In the November issue, the JOURNAL published an article by Dr. Currie on Rats and their relation to the spread of contagious disease. **RATS.** The JOURNAL is not aware of any similar article on this most important question, in a medical periodical, and therefore calls special attention to Dr. Currie's very valuable contribution to the subject. The public health authorities in charge of the work of cleaning up Chinatown are doing all that they can to get rid of the rats, but with comparatively little result. The rats seem to be, if anything, increasing in numbers, and every month specimens are found from which the bacillus pestis is isolated. During the month of October there were five deaths from plague; in November there were several more. A gentleman, who is in a position to form a close estimate, has advised us that, in his opinion, had

nothing been done toward the cleaning up of Chinatown, there would have been at least one hundred deaths from plague in the month of October, and many more in November. It is evident from Dr. Currie's paper that strong measures should be adopted looking toward the reduction in the rat supply of San Francisco. In the direction of cleaning up, disinfecting, improving sanitary conditions, etc., the authorities are doing splendid work and are to be highly commended. They are also doing what they can to stop the increase of rats, but their resources are very limited.

It will be seen from a careful reading of Dr. Currie's paper, that the most promising method of getting rid of rats is the payment

BOUNTY of a bounty under proper restrictions.
ON RATS. Obviously, if the bounty is a permanent thing, certain persons would very soon undertake the breeding of rats for the bounty. The period of gestation of the rat is forty days. Now suppose the bounty is offered for say forty or fifty days, and then discontinued for two months. It would probably be a week before anyone undertook the breeding of rats; forty days would elapse before they littered, and probably two weeks before they were of a proper size for offering for the bounty. But before they would thus be ready for the "market", the bounty would be withdrawn. It would hardly pay the breeder to feed his rats for two months in order to thus eventually get the small amount of bounty, and they would either be killed or turned loose. The plan need not, if adopted, necessitate the expenditure of a vast amount of money. If say ten cents bounty is offered for the first period of fifty days, and five or six cents for subsequent periods, after a lapse of suspended-bounty for two months between bounty-paying periods, probably a goodly reduction in the over-abundant rat supply would be effected; an object greatly to be desired, in view of the continuance of infected rats.

The JOURNAL would bespeak your careful attention to the Table of Synonyms, page 416, which it publishes with additions from month to month. The compilation of this table has required very hard and careful work, covering many weeks time, for the information there given is not easy, in most cases, to secure. Especially is this true in relation to the synthetics of German parentage. The various dye houses that have in the last few years undertaken the extensive manufacture and exploitation of remedies or *materia medica* products, have developed sundry curious business details that are as a rule un-

known to the physician. For instance, one manufacturer will put out a newly discovered and generally patented preparation having certain definite properties. Another concern will see that the first preparation or chemical is selling well, and it will then put out a similar preparation, adding, however, a few atoms of something, just enough not to infringe the patent rights of its competing dye house, nor to materially effect the action of the chemical. The result is that both can claim distinction in the matter of formula and therapeutic effect, while the fact remains that they are, to all intents, identical so far as any therapeutic value or action is concerned. The JOURNAL will be very glad to receive any suggestions in regard to this department, or any additions to the table of synonyms.

The *Boston Medical and Surgical Journal* published an excellent article by Dr. Geo. M. Gould, on the "Ill Health of Francis Parkman," in which Dr. Gould demonstrated, to the satisfaction of any ordinary individual, the fact that Parkman's ill health was almost undoubtedly due to uncorrected eyestrain. The *Boston Journal* thought Dr. Gould somewhat of a "crank" on this subject of eyestrain, and editorially told him so, in the most polite of Bostonese. Dr. Gould, who is well and thoroughly conversant with Bostonese and sees quickly what its English equivalent is, did not like to be called a crank, and so "came back" at the *Boston M. and S. J.* But there remained somewhat more of Boston diction, and the journal in question again commented editorially on Dr. Gould's letter. (There seems to be lacking a sense of humor, somewhere, in the vicinity of Boston). "We must, therefore, reiterate our opinion that Dr. Gould is an extremist in his advocacy of a theory which *unquestionably stands on a basis of scientific fact*". (Italics ours). Dr. Gould ought certainly to be satisfied with that; in the course of time probably Boston will advocate a theory that has a "basis of scientific fact." Perhaps the thing that rankles is the possibility that the population of Boston may not have been quite accurately refracted, and that a change of glasses may be necessary!

The temptation, ably resisted, was strong upon us to write "the Fool Killer", instead of the Toy Pistol. Since the publication in the *TOY Journal A. M. A.*, of a long and masterly summary of the deaths from tetanus due to the 4th-of-July-toy-pistol accidents, the medical press of the country has had a spasm. Editorial after editorial has been written, and resolutions have been passed; we publish elsewhere in this number of the JOURNAL (at special request), a sample set of resolutions.

They are most excellent. There is undoubtedly a great loss of life from this cause. But are not the ways of Providence sometimes called divine? Is not the elimination of the "4th of July idiot" providential? Ought we to be so temeritous as to try to alter the ways of Divine Providence? And even if it were possible to do away with the toy pistol, would not satanic ingenuity invent some other appliance for the immediate necessity of the fool killer? We long since developed sufficient Christian resignation to look forward with sorrowful regret to the indefinite continuance of the nerve-racking license of the 4th-of-July idiot. When the Toy Pistol article was published some glimmering hope was awakened; statistics seemed to show the activity of the fool-killer. But no; he must be squelched; we must still endure.

The title "doctor" was originally used to signify teacher in general, but in about the 12th century it became a title of honor
A TITLE FOR THE LEARNED, IRRESPECTIVE OF OF HONOR. In the 15th century a difference was observed between the professions of medicine and law, and theology and philosophy, the title "doctor" being bestowed upon the two first and "master" upon the others. In modern times "master" has practically disappeared. The title "doctor" when given an M. D., Phar.D., or D. D. S., is, as a rule, respected by most people; but, unfortunately, in this day of easily acquired titles, there is danger of the ancient and cherished title of doctor losing much of its distinction. It may be a debatable question as to whether there are too many doctors of medicine, but there is no denying the fact that there are too many doctors of everything else. In the plenitude of these the graduate in medicine is liable to become a "doc", the title worthily bestowed on many whose right to any title whatsoever is largely a matter of assumption. There is no more reason why a physician should be addressed as "doc" than that a master should be dubbed "mas", or a professor "prof". A physician who is habitually addressed as "doc" lacks one of two qualities—dignity or self-respect.

The corporation known as the "Eddyite Book Concern", or, with fine disregard of truth, the "Church of Christ, Scientist" (?), alias the Rev. Mrs. Dr. Mary Baker THIRST. Glover-Patterson-Eddy, alias "Mother Mary", is not fettered and trammeled with any particular regard for the fitness of things. Naturally, the alleged intellects of those who can say that they believe such stuff as

that "food neither strengthens nor weakens the body" could not be expected to have any particular reasoning quality. The inconsistency of several thousands of such idiots journeying to Boston to see "Mother Mary"—when they know from her own book (which has no substantial existence except the three-fifty it costs) that she herself cannot have any material existence, and that they themselves are only figments of the imagination, and consequently could as well think themselves in Boston as actually go there—is only to be expected. It is also not surprising that they should fail to appreciate the insult paid the prophetess when they were so inconsiderate and "unscientific" as to develop a thirst. How can a thought be thirsty and need the application of ice-water? But then—the word has been said; there needs must be always a certain number of fools; one is "born every minute".

The JOURNAL publishes this month an exceedingly interesting document. It is a circular or leaflet of instruction to school teachers concerning the importance of, and the method to be used in, examining the eyesight of school children. This leaflet has been prepared by the Superintendent of Schools, of Los Angeles, corrected and approved by the President of the Board of Education of that city, who, by the way, is the President of our State Society. To the best of our knowledge and belief, this is the first document of its class prepared by a school board in conjunction with a competent specialist for the specific purpose of being used officially in schools and studied by school teachers. It should receive the careful attention of every physician, and particularly of those who are interested in this question of the examination of school children's eyes. Certainly no more important question in school hygiene or in the physical and mental development of school children, can be urged. Ventilation, sufficient space, illumination, etc., and all questions of general sanitation are now matters of routine consideration by the architect and the school board. But the eyes of the pupil—upon which depend, one may say, the whole future life of the individual—must be considered by the specialist, or first by the teacher under instructions from the specialist.

THE NEW CONSTITUTION AND BY-LAWS.

On page 417 will be found the first installment of the proposed new constitution and by-laws, recommended by the special committee of five on that subject, appointed under a resolution passed by the House of Delegates at the last meeting of the State Society. The committee waited several months for one of its members,

who has been in Europe, but could not wait any longer, as it desired to have the proposed organic law of the Society published in the JOURNAL in ample time for sufficient consideration by all members. The editor has been requested by the committee to editorially discuss some of the more important questions involved, and to make such explanation as may be necessary to set the matter plainly before the members of the Society. As the whole scheme of reorganization along the broad lines advocated by the American Medical Association is involved, you are most earnestly requested to give this matter your very careful reading and digestion. The committee believes that, in many ways, the old constitution and by-laws is a superior document to that recommended by the A. M. A., but it contains certain basic differences which are entirely at issue with the general scheme of organization, and hence must be radically altered. The committee has therefore arranged the document herewith presented, which is made up of such portions of the old constitution and by-laws as could be retained, together with those parts of the document recommended by the A. M. A., as were essential. A great deal of mere phrase, of the "Sunday-school-book" sort, contained in the A. M. A. document has been eliminated. Queries concerning points that are not understood will be cheerfully answered in the JOURNAL.

There are two fundamental questions involved. The first is that which makes the county medical society the unit, the whole structure of the State Societies and the American Medical Association being formed of these county society units, and no others. That does away with all classes of members except those who are members of county societies. No members at large nor permanent members can retain their membership after one year from the adoption of this new Constitution and By-Laws. They must join a county society that is a component part of the State Society or the American Medical Association. The second major question is the omission of the word "regular" and the substitution for it of the phrase: "Every legally registered physician of good moral and professional standing and who does not practice nor claim to practice sectarian medicine, shall be eligible for membership." This places the matter entirely in the hands of the county societies. It is their duty and privilege to determine whether or not a given physician is or is not claiming to practice sectarian medicine—any "pathy." If he is not, and he is in all respects a good and satisfactory practitioner of medicine, then he may be elected to membership, if the members of the society choose to elect him. The whole question is in their hands. There is not and there cannot be any coercion. No society can be forced to elect any person to membership

within it unless two-thirds of its own members so declare. Other points of importance in regard to the changes introduced will be discussed in subsequent issues of the JOURNAL.

HOMEOPATHIC EXAMINATIONS.

To the Editor of the State Journal:—In reply to my inquiry as to the teaching of pathology in one of the homeopathic schools, I received the enclosed letter. As you will note, the questions asked are far harder and more searching than those required by the Board of Examiners.

Very truly yours,
A MEMBER OF THE BOARD,

July 9, 1902.

DEAR DOCTOR:—I inclose the last examination in special pathology at Hahnemann Medical College for one semester's work (4 months) junior and senior classes:

1. Describe the pathologic lesions of pernicious anemia.
2. Describe myelogenous leukemia. (a) Differentiate it from Hodgkin's disease.
3. What is general atheroma? How does it affect the heart? (a) How does atheroma of the coronary arteries affect the myocardium?
4. Describe endarteritis obliterans.
5. What is the function of bone marrow? (a) Give the varieties and under what conditions it exists normally and pathologically.
6. What is a sequestrum and how is it formed?
- (a) What is an involucrum and how is it formed?
7. Give the pathology of osteomalacia.
8. Give the macroscopical and microscopical appearance of round ulcer of the stomach. (a) Give the etiology.
9. What is Meckel's diverticulum? Where found? To what pathological lesions may it give rise?
10. Give three forms of tuberculosis found in the liver. (a) Describe one.
11. Describe chronic diffuse emphysema of the lung.
12. What is the sequence of a nonseptic infarction of the spleen.

The work in general pathology is covered in the sophomore year, hence this examination does not include any questions in that.

The Brain of Professor Laborde—Professor Papillault has published preliminary notes on the brain of the late Professor Laborde, the eminent French physiologist and anthropologist. The brain-weight was low, 1234 gms., but whether this was due to atrophy from old age (seventy-three years) or disease is not stated. Dr. Laborde's notable powers of speech led Papillault to examine the subfrontal gyres of the two sides with especial care, and he found that the area in question was demonstrably larger and more differentiated on the left side (where the motor speech-centers lie in right-handed persons) than on the right. The same feature characterized the brain of Gambetta. Unfortunately, Papillault makes no mention of the degree of development of the left insula as compared with the right, for it is this region which is most concerned with the association of the receptive and emissary centers of the cortex and so constitutes the true psychic speech-center. Papillault adds that, in general, the convolutions show an average degree of complexity.—E. A. Spitzka in *Science*.

DECAPSULATION OF THE KIDNEY FOR CHRONIC BRIGHT'S DISEASE.*

By GEORGE GOODFELLOW, M. D., and G. L. EATON, M. D.

THE rapid introduction of alleged new remedial measures, medical and surgical, during the past few decades, with resulting claims for their efficiency is remarkable and startling—so startling in fact, that one naturally is led to inquire into their utility. Such inquiry usually leads one to "bow the chin of doubt upon the collar of meditation," and to agree with the Philosopher of Greece, who said the only happy moments of life are those spent in the oblivion of slumber.

The descent and development of disease is a vast problem yet unsolved; our sensuous or empirical knowledge thereof has yet to be colligated by some Spencer or Darwin of the medical profession. The fundamental idea which must necessarily underlie all theories of disease is that of a gradual evolution of all diseases, even the most complex, in connection with the general evolutionary processes. Experience and philosophy do not stand in opposition one to the other; they supplement each other. The philosopher who lacks a foundation of sensuous experience—empirical knowledge—usually arrives at false conclusions in general speculations. On the other hand, the pure empiricist who fails to comprehend the philosophical bearing of his sensuous experience, who fails to strive after general knowledge, can promote science in a slight degree only, and the principal value of its hard-won knowledge of details lies in the general rules to be deduced by more comprehensive minds.

My purpose in this foreword is not to descant upon philosophy, but to call attention to the fact that there is unity in this universe of ours, and that we cannot make separate entities of diseases for purposes of treatment. Each must be looked upon as part of a general whole, the variations of which may for investigation be temporarily labeled. The rapid reversion to therapeutical methods that have been derided for many, many years as irrational, unscientific and brutal, particularly in glandular therapy, is noteworthy. Likewise, many surgical procedures can claim parentage from the time that the Shawm and Sackbut were used near the Willows of Babylon, and the morning song of Memnon arose to the sun.

The foregoing is apropos of an operation for the relief of a complex disease that has been written about much of late, and more recently discussed with a mild degree of acrimony, at a meeting of the County Medical Society of San Francisco, the so-called Edebohls operation for "Decapsulation of the kidney for Chronic Bright's Disease."

My doubts as to the partial benefits, at least, of the operation were somewhat dissipated through

one of our most skillful surgeons, Dr. G. W. Shiels, who brought to the notice of the San Francisco County Medical Society Edebohls' paper, describing the results of his efforts in that line, wherein was adduced the idea that the relief experienced was due to establishment of new circulation between the kidney and the surrounding structures. This view was traversed by Dr. H. A. Johnson, who adduced a number of laboratory experiments upon dogs that demonstrated that no such new circulation was established. However this may be, the clinical fact remains that relief from the operation is indubitable, and more or less permanent.

For my own part, looking upon Bright's disease as merely the expression of a general trouble, the name is a misnomer; I cannot yet accede to the proposition that the operation is a permanent curative measure, even if new circulation is, or is not, established.

At the Sixty-ninth Annual Meeting of the British Medical Association, held on July 30, 1901, a paper on "Renal Tension, and Its Treatment by Surgical Means" was read by Reginald Harrison.

Mr. Harrison draws attention in his article to the relief of tension by incision of the kidney in certain pathological conditions thereof. The cue that Mr. Harrison took for such procedure, was given by Von Graefe's operation for the relief of glaucoma, that resulted in the saving of a large number of eyes, which previous to this discovery would undoubtedly have been lost, and converted an incurable disease into a curable one, at the same time demonstrating if not the true nature of the disorder, a method of cure. Hence, it was suggested by Mr. Harrison, that the term "Renal Glaucoma" was not an inappropriate one.

Mr. Harrison applied this procedure, in 1878, to a youth 18 years of age, suffering from scarring nephritis. The capsule was incised, and there was a full discharge of blood and urine from the wound, which continued for several days. The wound was plugged with lint, and in the course of ten days or so healed soundly. After the incision was made the excretion of urine became far more abundant, and the albumin gradually and completely disappeared. Following this experience five other patients were operated on by him, one in '87, another in '93, another in '97, another in '98 and another in '99, all for the relief of kidney tension, either from an injury, acute nephritis, or suspected calculi.

W. D. Spanton, in 1900, cited two patients on whom he operated for extravasation and inflammation by incising the capsule; both recovered.

Decapsulation of the kidney for chronic Bright's disease is elaborately discussed for the first time by G. M. Edebohls in the *Medical Record*, December 21, 1901, and subsequently in the

* Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1901.

British Medical Journal, November 8, 1902. Prior to both of these dates, however, the same author had published in the *Medical News*, April 22, 1899, "The Relief of Chronic Nephritis by Nephropexy." The favorable results obtained suggested to the author's mind the total decapsulation of the kidney for chronic Bright's disease, and to him, I believe, must be given the credit of priority. On December 3, 1901, the first decapsulation of both kidneys was performed on a woman 43 years of age, with a family history of Bright's disease. He tabulates "18 cases of women whose ages vary between 19 and 45, averaging 31½ years" upon whom he operated. Cases of chronic Bright's disease only are included in the list. He says:

Of the 18 patients, 5 had right chronic interstitial nephritis; 4 had left chronic interstitial nephritis; 4 had right and left chronic interstitial nephritis; 2 had right and left chronic parenchymatous nephritis; and 3 had right and left chronic diffused nephritis. In 14 of the 18 patients both of the kidneys were operated upon; in 12 instances at one sitting, and twice at two sittings. In 4 patients, operation was performed on one kidney only, in every instance the right. Out of the 4 patients whose right kidney alone was operated upon, 2 have recovered complete and lasting health. Embodying these conclusions with the statements contained in Table 1, we find that the left kidney alone was affected by chronic Bright's disease in 4 cases; the right alone in 4 cases, and both kidneys in nine cases; while in one case the unilateral or bilateral nature of the disease remained undetermined. The determination of the pathological lesions was made by Professor H. T. Brooks.

In all of the cases relief has followed the operation; the time, however, for most of them being too short to give conclusive information as to the absolutely curative effects of the procedure. The preceding would seem to show that only 50 per cent. of all cases of Bright's disease are bilateral, and suggests the use of the cystoscope, with urethral catheterization, or Harris' segregator, to determine whether one or both kidneys are involved, thereby enabling the operator to decapsulate the kidney at fault, minimizing the shock, and perturbation of function that might be expected to follow traumatism in a healthy excretory organ of such importance. And I would advise clinical examinations of the urine secreted by each kidney in every case of suspected nephritis where operative procedure is contemplated.

Dr. Cabot in the *Boston Medical and Surgical Journal*, October 23, 1902, also reports two operations; both patients temporarily improved. Dr. Elliott at the same time reports two operations, one for Bright's disease, the other for scarlatinal nephritis; both patients improved.

My operation was made as follows: Incisions on both sides along the erector spinae muscles from the twelfth rib to the crest of the ilium. Owing to the water-logged condition of the tissues the kidneys were at considerable depth, but

no great difficulty was experienced in raising them to the surface. They presented a typical appearance of chronic parenchymatous nephritis, both upper poles filled with broad hemorrhagic infarctions, with a cyst in the lower pole of the left one. The capsules were split from pole to pole, and stripped completely from the body of the kidneys, and the kidneys incised to a slight depth. Here I diverged from Edebohl's technique, for instead of removing the capsule I attached each side of the capsule to the muscles with a single suture, making an incomplete nephropexy, only partially uniting the wounds, filling the remainder of the cavities with gauze. The time of operation was not long, and the patient left the table in good shape. The subsequent history of the patient will be detailed by Dr. Eaton, who kept accurate reports to the day that the patient insisted on going to his home some two hundred miles distant, since which time I have heard nothing from him. The operation was made under spinal cocainization, about one-fifth of a grain of hydrochlorate of cocaine being used. I was assisted by Drs. Eaton, McConnell, O'Neill and Emmal. The discharge from the wounds was profuse for several days, and continued in diminishing quantity until the 13th day, when practically it ceased. His improvement for some days was astounding—anarsa and ascites diminished, urine increased, appetite returned ravenously, he calling for food constantly.

One point worthy of mention was that the odor of the secretion from the back was strongly ammoniacal, while the urinary secretion was normal. I do not think that closure of the wounds even partially is advisable in cases where such extensive anarsa and ascites exist, as in the case of the patient upon whom I operated. Drainage is enormous, necessitating constant care to prevent refrigeration of the patient; furthermore, the flow appears to be just what is needed, being continuous and gentle.

On the afternoon of March 29th, the patient was sitting up in bed smoking a cigar, and informed me that he was going home on the following day. My protest was unhoneyed, but availed nothing. Consulting his wife, I urged her to interpose, but she said he was "too wilful." Dr. Eaton added his protest to mine, but with equal effect. They left next day for a point somewhere south of Fresno, and in spite of requests to keep us informed of his condition, we have heard nothing.

On leaving, his condition, objectively, was good—slight edema in the upper part of the right thigh; probably a small amount of fluid in the abdominal cavity; the abdomen was flaccid, but I presume that all fluid had never disappeared. The albumin had increased, but that was the only disagreeable or unfavorable sign. The wounds, except superficially where the gauze had been

packed, were closed, drainage, as I have said, having ceased on the 13th day.

I regret that no further information can be given.

In my opinion the operation is a perfectly justifiable one, particularly with patients *in extremis*, and the result of other operations in nephritic conditions due to divers causes, certainly make it a safe procedure. Spinal anesthesia will prove of inestimable value where a general anesthetic cannot be given.

Dr. George L. Eaton, San Francisco.—On March 11, 1903, I was called to see Mr. H., age 41, born in New York, married, temperate habits; moderate use of alcohol and tobacco; residence, Fresno County, California. No history of venereal disease. Father died of "inflammation of the bowels" at the age of 33. Mother's cause of death not known. Two sisters living and in good health. Had measles in childhood. Has had several attacks of malaria, one lasting from 17 to 18 months; last one about six years ago. Had "La Grippe" about six years ago. Otherwise has enjoyed good health, with the exception of now and then urethral irritation, accompanied by frequent urination, and a "stiffness of his joints," as he described it, "like a foundered horse." To all appearances he was in a dying condition, having passed no urine whatever for twenty-four hours. Pulse 150, respiration 35, temperature 97 F. per rectum, with signs of uremic infection. Extensive anasarca from head to feet, with ascites. Abdominal distension was so great as to interfere with respiration, and the patient was required to remain in a semi-recumbent position. Questioning him carefully as to the onset of the disease, he said that 12 weeks before he had noticed a swelling of the feet and legs. Prior to that date he had never had any apparent kidney affection.

By catheterization four ounces of urine was obtained, the examination of the same being embodied in the urinary analysis. In consultation with Dr. G. E. Goodfellow on the above date, we performed paracentesis abdominalis, removing approximately two and one-half gallons of ascitic fluid, which apparently gave the patient considerable relief, and made him comfortable for the night. Operation of decapsulation of the kidney was advised and accepted, the same being performed at 12 m. on March 12th. The steps of the operation have been described by Dr. Goodfellow.

I will not take time by going into minute details of the daily urinalysis, but will confine myself to the most important features of the case, namely, the quantity of urine passed each 24 hours and the increase and decrease of albumin, urea and casts. Microscopic examination demonstrated always an abundance of epithelia from the kidneys with amorphous detritus. From March 12th to March 15th each passage of urine was examined, the highest and lowest percentage of albumin recorded, and the highest and lowest of urea. After that, until the 25th of March, the analyses were made from samples of total urine passed each 12 hours, the same percentages being recorded. After the 25th, samples of the total for each 24 hours were used. The totals recorded after the 14th do not represent the total amount of urine, as, in spite of instructions and precautions, some was invariably lost during defecation which occurred from twice to three times each 24 hours. This more particularly, as the patient grew stronger and more obstreporous.

Examination of urine secured on March 11th at 10:30 p. m.:

Amount, 4 ounces; color, dark yellow; appearance, cloudy; reaction, acid; specific gravity, 1020; albumin, 7-12 of 1 per cent.; sugar, absent; chlorides, decreased; urea, 1 per cent; indican, increased.

Microscopical examination:

Casts, blood, granular, hyaline and waxy; crystals, absent; epithelia, from pelvis of kidney and uriniferous tubules; pus, present; blood, present; bacteria, present.

March 13, 6 p. m.

Total quantity, 24 hours, 27½ ounces; albumin, highest, 8-12 of 1 per cent., lowest, 4-12 of 1 per cent.; urea, highest, 1¾ per cent, lowest, 1½ per cent; casts, gradual decrease.

One interesting feature was the appearance of hippuric acid crystals. Patient had taken 21 grs. hexamethylene-tetranamine on March 10, which was transformed into hippuric acid.

March 14, 6 p. m.

Total quantity, 24 hours, 38 ounces; albumin, highest, 5-12 of 1 per cent., lowest, 5-12 of 1 per cent.; urea, highest, 2 per cent; lowest, 1-3 per cent; casts, marked diminution.

March 15, 6 p. m.

Total quantity, 24 hours, 36 ounces; albumin, highest, 6-12 of 1 per cent, lowest, 4-12 of 1 per cent.; urea, highest, 1¾ per cent, lowest, 1¼ per cent; casts, few blood and granular casts.

With the exception of the low percentage of urea, 1¼ per cent, the urine is better than on any previous day.

March 16, 6 p. m.

Total quantity, 24 hours, 41 ounces; albumin, highest, —, lowest, 5-12 of 1 per cent; urea, highest, 2 per cent, lowest, 1¾ per cent; casts, very few, principally hyaline.

March 17, 6 p. m.

Total quantity, 24 hours, 45 ounces; albumin, highest, —; lowest, 3-12 of 1 per cent; urea, highest, 2 per cent; casts, have disappeared; several examinations having been made for them, but without success.

March 18, 6 p. m.

Total quantity, 24 hours, 45 ounces; albumin, highest, —; lowest, 5-12 of 1 per cent; urea, highest, 2 per cent, lowest, 1¾ per cent; casts, still absent.

March 19, 6 p. m.

Total quantity, 24 hours, 51 ounces; albumin, highest, —, lowest, 6-12 of 1 per cent; urea, highest, 1¾ per cent, lowest, 1¼ per cent; casts, hyaline.

Largest amount of urine passed during treatment of the case.

March 20, 6 p. m.

Total quantity, 24 hours, 32 ounces; albumin, highest, 1 per cent, lowest, 8-12 of 1 per cent; urea, highest, 1½ per cent; casts, again appeared, principally blood and granular. Wounds in the back draining very slightly.

March 21, 6 p. m.

Total quantity, 24 hours, 31 ounces; albumin, highest, —, lowest, 7-12 of 1 per cent; urea, highest, 1¾ per cent, lowest, 1¼ per cent; casts, increase in granular and blood; trace of sugar for the first and only time; 5:30 p. m. patient received 7½ ounces salt transfusion.

March 22, 7:30 p. m.

Total quantity, 24 hours, 20 ounces; albumin, highest, —, lowest, 5-12 of 1 per cent; urea, highest, 1¾ per cent, lowest, 1¼ per cent; casts, granular; slight decrease; patient has been receiving salt transfusions.

March 23, 6 p. m.

Total quantity, 24½ ounces; albumin, highest, 1 per cent, lowest, 1 per cent; urea, highest, 1½ per cent, lowest, 1½ per cent; casts, few hyaline and granular; patient was removed to another hospital.

March 24, 6 p. m.

Total quantity, 32½ ounces; albumin, highest, 1 per cent, lowest, ½ of 1 per cent; urea, highest, 1½ per cent; casts, hyaline.

March 25, 26, 27.

Total quantity for each 24 hours, averaged 33 ounces; albumin, highest, 1 4-12 per cent, lowest, 7-12 of 1 per cent; urea, averaged 1½ per cent; casts, hyaline and granular.

March 28, 29, 30.

Total quantity for each 24 hours, averaged 30 ounces; albumin, highest, 8-12 of 1 per cent, lowest, 8-12 of 1 per cent; urea, highest, 1½ per cent, lowest, 1½ per cent. Casts, hyaline and granular.

By the examination of the urine twice daily, we have determined three effects that have hitherto been partially described by Harrison, Edebohlis and Cabot, namely: the increased secretion of urine, decrease of albumin and casts, and the increase of urea.

As Harrison says: "The following may be regarded as some indications for relieving tension surgically in cases of nephritis: Progressive signs of kidney deterioration, as shown by the persistence or increase of albumin and casts; suppression of urine approaching the state of uremia; where a marked disturbance of the heart and circulatory apparatus arises in the course of inflammatory renal disorders."

DISCUSSION.

Dr. Dudley Tait, San Francisco—It is necessary to reason logically in these cases. Under the circumstances Dr. Goodfellow used good surgical interference. These cases are not all toxic. Referred to cryoscopic work as means of diagnosis. Many have uremic conditions. In treatment of the present case, Dr. Goodfellow shows sudden increase of urine. This might be explained by possibility of stone blocking one side. Referred to elimination of epithelium and also toxic influence on the system.

Dr. J. Rosenstirn, San Francisco—I agree with Dr. Tait. In Edebohlis' operation there has not been made any differentiation of the forms of nephritis. There may be nephritis from scarlet fever. I myself had scarlatina nephritis in 1871. I had albuminuria, but got over it, and have not had any sign of it since. There are not many cases which justify the operation. Patients get better for a time. The drainage will relieve the patient for a long time. I do not know the real benefits. The quantity and not the quality of urine is changed. The amount of urea excreted depends upon what the patient eats and drinks. The amount of urea does not give us any knowledge of the condition of the kidney.

Dr. L. Bazet, San Francisco—I have had no experience with this operation. I recall one case where the surgeon, having cut down upon the kidney, opened the capsule, as Dr. Goodfellow did, but before closing the wound removed a small section of the kidney and sent it to a pathologist to examine. In my belief in all these cases a small portion should be sent to the pathologist.

Dr. G. MacGowan, Los Angeles—Last year when in New York and Philadelphia I saw Dr. Edebohlis do several operations. He is very honest about his work. I saw a few other doctors do the operation and did one myself. Dr. Edebohlis' operation was beautiful. He had a considerable degree of confidence, and the operation takes from thirty minutes to one hour. I consider it very foolish to operate in all cases of

Bright's. Sometimes there is great difficulty in getting at the kidney and decapsulating it.

Dr. D. D. Crowley, Oakland—I can say very little of the operation. I think a long incision is as good as removal of the capsule. As to technique, little has been said. In operation I raise the kidney into the wound. All that is necessary is to make an incision, puncture, insert a grooved director under the capsule, and then split it up. Otherwise I think with only the pressure of the hand in raising up the kidney there is not enough support made to cut the capsule properly without cutting the kidney itself.

Dr. K. Pischel, San Francisco—Has any ophthalmoscopic examination of the eyes been made in these cases? In ophthalmoscopic examinations we can see the condition of the retina, and what pathological conditions we find in the fundus we can find in other places. We can see the condition of the capsules, which is very important.

Dr. Goodfellow—I had expected that I would bring out more discussion as to the various methods of examination of the urine.

REPORT OF SIX CASES OF ACHLORHYDRIA.*

By AUSTIN V. MILLER, M. D., Ferndale.

LEAVING out cancer of the stomach, achlorhydria includes a class of diseases in which free hydrochloric acid is not found in the chyme. The condition may be congenital, it may rest on some neurasthenic basis, or it may be acquired in consequence of some organic gastric disease.

Undoubtedly there are persons whose hydrochloric acid secretion is absent for years or permanently wanting, yet who seem to be in the best of health. The majority of these individuals, however, have suffered from more or less frequent dyspeptic complaints. The function of the stomach may be permanently lost so far as its digestive power is concerned, yet with no apparent effect upon the general constitution. But gastric secretion is by no means a useless function. It has been said that those who have lost it have one less weapon in the struggle for existence. Persons who have no secretion of gastric juice are much more liable to diseases of the stomach and intestines.

Achlorhydria is a disease of protean manifestations. The disturbances of function may long remain latent. Persons with an acidity may have no subjective nor objective disturbances of any kind, but sooner or later dyspeptic complaints arise. The subjective sensations are not characteristic, but are often those of nervous dyspepsia, accompanied by eructations, fullness and pressure after eating, gradually leading to attacks of severe gastralgia. The symptomatology as based upon the complaints of the patient is most accentuated in neurasthenics. In persons of a perfectly sound nervous system achlia may exist and the individual may be unaware of it.

On the other hand, most of those coming to the doctor for relief complain of one or more symptoms of considerable severity. There may be a sense of weight in the stomach, lasting several

* Read before the Humboldt County Medical Society.

hours after meals, which increases to a severe gastralgia which is only relieved by vomiting. There is often anorexia, flatulence, and intestinal disturbances. These patients frequently give the history of having taken a vast array of drugs for an alleged disorder of the liver. It has been found and is illustrated in several of the following cases that loss of gastric secretion predisposes to diarrhea and intestinal catarrhs, which are not benefited until the gastric defect is discovered, when rational treatment effects improvement. These diarrheas are probably due to fermentative processes developed in the absence of hydrochloric acid secretion and dependent upon the lack of its antiseptic effects.

In the treatment of the condition, hydrochloric acid given after meals is of the first importance. Its action is threefold: First, it supplements the digestion of proteids in the stomach; second, it acts as an antiseptic; third, it is a tonic and stomachic. It has been questioned whether enough hydrochloric acid can be taken by the mouth to make up the gastric deficit. One hundred drops of dilute hydrochloric acid digest only four drams of egg albumen. Notwithstanding this doubt and theoretical objection it takes but a brief clinical experience to observe the remarkably good results from the administration of the acid even in comparatively small doses. For a full consideration of this subject see "Acylia Gastrica," in Hemmeter's "Diseases of the Stomach."

Case I. March 20.—Mr. U., 62 years old. Every two or three days, vomits after a meal. Bowels are constipated for two or three days and then there is diarrhea for several days. The trouble has lasted five or six years. Examination.—Stomach on inflation with CO₂ is not found to be enlarged. After the double test meal of Salzer, hydrochloric cannot be detected by the delicate test with dimethyl-amido-azo-benzol. There is no acidity with litmus. The total acidity using phenolphthalein as an indicator is 10°. Ordered teeth to be cleaned and attended to by dentist. Ordered diluted hydrochloric acid 20 gtt. after meals. March 31. Feels well, no diarrhea, no vomiting. Has continued well since.

Case II. April 7.—Miss V., 26 years old. Complains of vomiting supper five or six hours after taking it. Appetite fair. No flatulence nor eructations. Bowels regular. Examination—Stomach on inflation is normal in size. After double test meal, hydrochloric acid is found to be absent. Total acidity is 25°. Egg and meat of morning meal is not yet digested. Ordered 10 m. dilute hydrochloric acid after meals. April 15. Feels perfectly well. No trouble with stomach. Good appetite. April 22. Says she is cured. Analysis since shows continued absence of hydrochloric acid.

Case III. April 19.—Mr. W., age 49 years. Complains of a sense of weight in stomach and a pain in epigastrium; poor appetite; waterbrash; frequently bloats; never vomits; bowels regular. Has had to quit work. For last 11 years has been under treatment for disorder of stomach and liver and has complained of symptoms similar to these. Examination—Lower border of stomach on inflation at level of umbilicus. After double test meal a fair amount of chyme expressed. A small amount of egg and meat

still undigested. Chyme consists mostly of bread and water. Hydrochloric acid absent. Total acidity 10°. Ordered 10 gtt. of dilute hydrochloric acid after meals. March 4. Is much improved. No more pain in abdomen nor back. Has gained five pounds. Analysis of stomach contents shows absence of hydrochloric acid and there is no acidity by litmus. Returns to work, taking 40 gtt. of dilute hydrochloric acid after meals.

Case IV. May 9.—Mr. X., age 51 years. Complains of excessive secretion of saliva. Anorexia; constipation; indefinite distress in stomach. Examination—Stomach contents withdrawn after Ewald's test breakfast. Considerable mucus present. Hydrochloric acid absent. Total acidity 10°. Litmus shows slight acidity. Lactic acid absent. Ordered XX gtt. dilute hydrochloric acid after meals. May 26. Weight has increased 10 pounds. Has no complaints. At last report he is feeling well as long as he takes the acid regularly.

Case V.—Mrs. Y. has had a diarrhea for two weeks, which is not checked by large doses of Bismuth subnitrate. Necessary to give morphin to stop the frequent evacuations. Complains of distress in epigastrium. Examination—After test breakfast hydrochloric acid is absent. Total acidity 45°. Ordered a mixture of Betanaphthol-bismuth and resorcin with 20m. of dilute hydrochloric acid after meals. Recovery from diarrhea complete.

Case VI. June 9.—Mrs. Z., age 41. Complains of pain and tenderness in epigastrium; vomits occasionally after meals; constipated. Has lost 14 pounds in six weeks, weight now 150. Trouble began six weeks ago, like an attack of biliousness. Examination—Stomach being inflated with CO₂ its lower border reaches 1½ inches below umbilicus. After double test meal hydrochloric acid is absent. Hemoglobin percentage is 50. Urine shows a slight excess of indican. Ordered 20 gtt. dilute hydrochloric acid after meals. Fluid ext cascara for the constipation. July 1. Much improved, but complains of occasional biliousness. Ordered 40 gtt. dilute hydrochloric acid after meals. Aug. 25. No longer has any pain in stomach nor nausea, but complains of not getting strong, of feeling drowsy, bad taste in mouth and having to continue cascara. Examination—Hb. 65 per cent R. B. C. 3,000,000 per cmm. After double test meal some meat, egg and coagulated milk still undigested. Hydrochloric acid absent. Lactic acid present. Total acidity 25°. Treatment—Continue hydrochloric acid with addition of iron for the anemia, and strychnia.

PUERPERAL SEPTICEMIA.*

By R. A. WHIFFIN, M. D., San Jose.

THIS subject has recently been brought so strongly to our notice that it seems to me a short paper to bring it before us for discussion will be pertinent at this time.

This is a disease that has probably existed almost as long as the human race, yet one that has not been understood until comparatively recent times. Dr. Oliver Wendell Holmes in 1843 made a strong plea for care in attending cases of confinement after attending autopsies or cases of erysipelas, but it fell to the lot of Semmelweis of Vienna, in 1847, to discover that what Dr. Holmes suspected was a fact, and to him we owe our first real knowledge of the causes of puerperal septicemia. It was not exactly an

* Read before the Santa Clara County Medical Society.

accidental discovery, but was made by comparing the symptoms of the fatal illness of Prof. Kletchka of Vienna, which illness was caused by a wound he received while dissecting, with those of puerperal septicemia, which they resembled. This resemblance made Semmelweis think there might be a connection between the two diseases, and to prove it he made all his students who were working in the dissecting room wash their hands in chlorine water before examining a pregnant woman, and by so doing reduced the mortality from septicemia among women confined by his students from 11.4 per cent to 1.27 per cent, which was certainly proof that unclean hands carried the disease. Without knowing it Semmelweis anticipated Lister and Pasteur in practical antisepsis. It was a long time before Semmelweis' ideas received much credence, but they have been gradually elaborated until at the present time we know that puerperal septicemia is caused by an infection with some microorganism, almost always from outside the uterus or vagina.

The actual cause of septicemia is the toxins elaborated by the microorganisms which infect the abraded surfaces and develop in the secretions and detritus left after childbirth. A number of bacteria can cause the disease; chief among the offenders are the staphylococcus pyogenes aureus and streptococcus pyogenes, and occasionally diphtheria or colon bacilli may be the cause; any pathogenic microorganism may cause the disease, although the infections by different microbes no doubt cause different degrees of severity of the disease. When we speak of one form of microorganism being the cause, I think we must consider the predominating microorganism, as there is no doubt very seldom a case caused by one microorganism alone.

The pathology is not very lengthy. When the bacteria once get inside the uterus they find conditions that are unsurpassed for development; the secretions are profuse and there may be a few shreds of membrane or a small piece of retained placenta which, with the heat and moisture, make excellent culture media. They develop rapidly, elaborating their poisons, which are as rapidly absorbed by the abundant blood vessels and lymphatics in the walls of the uterus and vagina. On the surface where the placenta has been removed and on the surface of any abrasions along the parturient canal may be found ruptured blood vessels and lymphatics; into these the bacteria advance, thus getting into the general circulation to be carried to other parts of the body. Those taken up by the lymphatics are more liable to lodge somewhere in the pelvis, causing cellulitis; those getting into the blood vessels by passing through the general circulation may form abscesses in any part of the body. In some cases we apparently have only the poisons absorbed

from the uterus, resulting in a comparatively mild disease as there is only the one factory for toxins; when other abscesses occur we have several factories making toxins. In the very virulent cases where death occurs there is very little pathology; in fact, outside of the infection and inflammation of the uterus there is only to be found a beginning fatty degeneration of all the organs of the body; when the disease lasts for several days or weeks we usually have septicemia and pyemia combined, or, as it has been called, septico-pyemia, with abscesses outside of the uterus as well as general fatty degeneration. If the patient recovers we frequently find abscesses in the cellular tissue of the pelvis, or tubular or ovarian abscesses.

Passing over the symptoms, which can be read in the text-books, I will give you some of the methods of treatment which should most interest us as practical physicians and surgeons. The first thing we think of when a chill occurs or the temperature creeps up, is that there is some absorption from the vagina and we try a few vaginal douches; this, of course, providing we can find no other absolute cause for the chill or temperature. If the vaginal douches fail to accomplish a reduction of temperature and other symptoms of toxemia arise, the next thing is to douche the uterus; if that accomplishes our end we do no more, but if not, the patient is put under an anesthetic and a thorough curetting of the uterus done with a dull curette, giving a douche at the same time. Here is where a difference of opinion occurs; some surgeons believe in not packing the uterus at all after curetting, others in packing with plain gauze, which seems to me the most rational, while others use iodoform gauze, which I object to on account of the possibility of iodoform poisoning. Dr. Ochsner of Chicago packs with gauze saturated with alcohol, a treatment I have never seen used. Any of these packings should be removed in 8 to 12 hours and the uterus douched; in some cases re-packing may be done, but I have thought that the best results were obtained by douching the uterus every 12 to 4 hours; in the treatment used by Dr. Ochsner, he repacks with gauze saturated with alcohol and keeps the patient in as near absolute rest as possible. He believes that absolute rest in all inflammations is a necessity in order to obtain the best results. Solutions for douching may be normal saline solution, lysol 2½ per cent, bichlorid of mercury 1-10,000 to 1-5000, or carbolic acid 2 per cent to 5 per cent. I prefer the solution of bichlorid of mercury, followed by normal saline solution until I see some slight symptoms of mercury poisoning, then changing to lysol. The lysol solution is more soothing to the patient. As to the quantity of solution necessary for each douche, I prefer

about four quarts, with the syringe or irrigator hung very low so as to make very little pressure and have the douche last from fifteen to twenty minutes. I think it is not advisable to leave any antiseptic solution in the uterus, as in its lax condition it will retain some, I make a practice of following mercury, lysol or carbolic acid irrigations with about two quarts normal saline solution.

We hear a great deal about antitoxins and the use of anti-streptococcus serum. To my mind there is no doubt of the value of anti-streptococcus serum if we can prove that the streptococcus is the offending microorganism, but that is something the general practitioner cannot often prove, and in fact, we are more apt to have a mixed infection. If we have a membranous condition present and a culture develops diphtheria bacilli in a few hours, we should certainly use anti-diphtheritic serum, but it would not be right to stop other treatment and depend entirely on the serum as we might have other infection as well. I don't want to be misunderstood in regard to serums, for I have great faith in them where we can prove that they are applicable; I simply want to carry the impression that it would be harder to prove the streptococcus to be the cause of severe symptoms than to prove the presence of diphtheria when a membrane is present. If we give anti-streptococcus serum I think we do so more as a precautionary measure than with a feeling of certainty that we are going to counteract a streptococcus infection. The use of formalin solutions which was loudly heralded a short time ago, seems not to be a practical treatment.

Sustaining treatment is of great importance and as usual, in cases of fever, we put the patient on a liquid diet, furnishing as much nourishment as possible with the least effort on the part of the digestive organs. Whiskey, with some physicians, has been a sort of sheet anchor in suppurative cases for a long time and does a great deal of good, but I prefer a nourishing diet and such stimulants as strychnin and nitroglycerin. I also think that an infusion of normal saline solution occasionally does a great deal toward diluting the toxins and helping the system to throw them off. Any other treatment would be for the relief of symptoms as they arise.

More important than treatment is prophylaxis; we, as physicians and surgeons should use every means in our power to have our obstetrical patients cared for in a cleanly manner, as near aseptic as possible, making the surroundings the best that circumstances will permit and leaving nothing undone by ourselves in the way of sterilizing our hands and instruments. It is seldom that we do not have time to prepare for taking care of our patients and there is always plenty of

soap and water to be obtained for the asking. The vigorous use of that same soap and water and a good brush will save us a great deal of trouble and no doubt save some lives, although we may not be aware of it at the time. I wish to protest against the somewhat general idea that a little antiseptic solution to wash the hands in is sufficient; the hands should be thoroughly scrubbed with a brush and soap before using an antiseptic solution, and if the soap and brush are properly used I think the antiseptic solutions as usually used are little aid to antisepsis, but more of a show. I therefore make my plea for a more thorough use of soap and water and a good stiff brush. Running water is preferable.

A society for the study of tropical medicine has been organized at Philadelphia, with Dr. Thomas H. Fenton as president, and Dr. Joseph McFarland as secretary.

An appointment as assistant demonstrator of physiology in the Medical Department of the University of Pennsylvania is open for applications. The appointee will devote his mornings to laboratory teaching, his afternoons to research, and will receive a salary of \$500.—*Science*.

NOTE: As there will undoubtedly be a great many applicants for a position carrying such a magnificent salary, "call early and avoid the rush."

INTERESTING BULLETIN.

Studies of the Food Value of Fruit at the University of California; a bulletin (No. 473) of the Dept. of Agriculture, compiled from the experimental work of Prof. M. E. Jaffa, U. C.

"The cost of the fruitarian diet per person per day varied from 18 to 46 cents, values which compare favorably with those found for an ordinary mixed diet.

"Although it is undoubtedly advisable to wait until more data have been gathered before making definite statements regarding the digestibility of different fruits and nuts, enough work has been done to show that they are quite thoroughly digested and have a much higher nutritive value than is popularly attributed to them. In view of this it is certainly an error to consider nuts merely as an accessory to an already heavy meal and to regard fruit merely as something of value for its pleasant flavor or for its hygienic or medicinal virtues.

"As shown by their composition and digestibility, both fruit and nuts can be favorably compared with other and more common foods. As sources of carbohydrates, fruits at ordinary prices are not expensive; and as sources of protein and fat, nuts at usual prices are reasonable foods.

"In the investigations at the University of California the question of the wholesomeness of a long-continued diet of fruit and nuts is not taken up. The agreement of one food or another with any person is frequently more or less a matter of personal idiosyncrasy, but it seems fair to say that those with whom nuts and fruits agree can, if they desire, readily secure a considerable part of their nutritive material from such sources."

TUBERCULOSIS IN FOWLS.

By ARCHIBALD R. WARD, D. V. M.,
University of California, Berkeley.

In ACCORDANCE with the provisions of the legislative act creating the California Poultry Experiment Station, and in compliance with the oft-repeated request of poultrymen, investigations have been made during the past summer on poultry diseases. Dr. V. A. Moore* of Cornell University, and the writer, have made frequent excursions in the poultry-raising districts and have, through the courtesy of many interested individuals, obtained diseased fowls for examination in the bacteriological laboratory at Berkeley. One of the conclusions drawn from the summer's work is that tuberculosis is one of the important diseases of fowls. While much remains to be done in the way of conducting practical tests of the means of controlling the disease, some facts are available for publication at the present time. Tuberculosis in fowls is a well-known disease in Europe, and its control has been discussed by Dr. med. F. A. Zurn (1), Cameron (2), Meek (3), Zurn (4) and E. S. Zurn (5). The disease is described by several American writers, among them Salmon (6) and Chester (7), but the writer has so far succeeded in finding but one American writer—Pernot (8)—describing an outbreak of the disease.

As observed by the present writer, the disease exists extensively among the large poultry ranches, but seldom kills a sufficient number of fowls at any one time to excite the alarm of the owner. Its existence in a flock constitutes a steady drain, but it attracts slight attention because poultrymen are accustomed to large losses from diseases and reckon such as a part of the business. In one instance the disease was brought to the attention of the writer by an owner who reported a loss of about 250 out of a flock of 1400 fowls in a year. The owner had made a large number of post mortem examinations, and as the lesions are easily recognized, the observation has some interest.

Symptoms are only noticeable in advanced cases. The bird becomes excessively emaciated, a condition which is easily recognized by the atrophy of the pectoral muscles. The victim crouches from weakness and in some cases lameness or peculiarity of gait are observed. Post mortem examination of lame hens has sometimes revealed tubercular lesions of the femoro-tibial articulation, and in other cases no lesions in the legs could be demonstrated. The comb is usually pale and the voice is weakened in some cases. The attitude, condition of the feathers, etc., constitute features by which a bad case of tuberculosis in the hen may be recognized at a glance, quite as readily as a similar case in man.

The following observations are based upon thirty post mortems. Lesions are most frequently shown by the liver and spleen. The liver may be more or less enlarged, altered in color and sprinkled with gray or slightly yellowish tubercles varying from 3mm. in diameter down. (See Fig. 1.) The spleen may merely show small tubercles

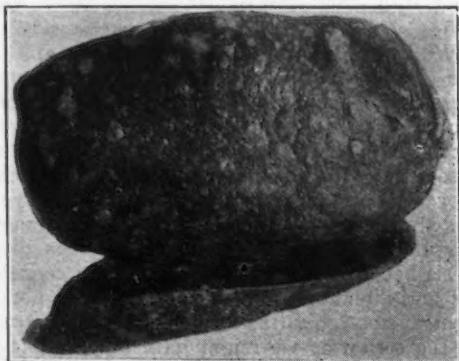


Fig. 1.

or may be distended to several times its normal size by tubercular growths. The mesentery is occasionally sprinkled with tubercle as shown in Fig. 2. Tubercles on the intestines are quite con-

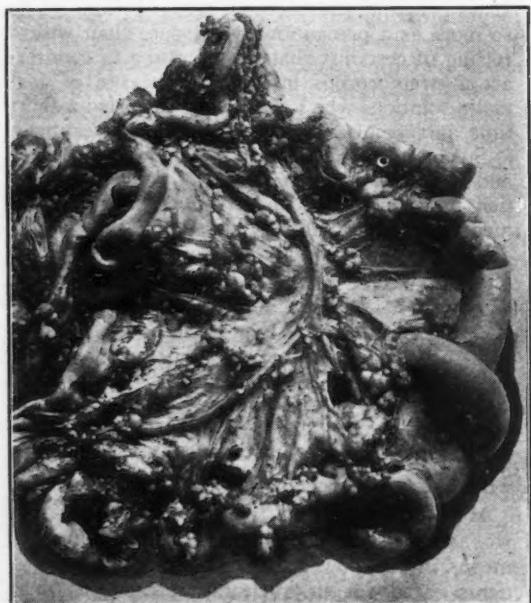


Fig. 2.

mon and not infrequently hollow tubercular masses as large as a walnut communicate directly with the lumen of the intes-

* The writer desires to acknowledge the assistance rendered by Dr. Moore in collecting the data upon which this article is based. A more comprehensive paper was read at the recent meeting of the American Veterinary Medical Association and will appear in the forthcoming volume of the transactions of that association.

tine. Lesions of the heart, kidneys, lungs and skin are comparatively uncommon. In one case only have the lungs been involved—sprinkled thickly with small, grayish, glistening tubercles about the size of a millet seed.

The one case in which the skin was involved presented interesting lesions. The fowl was very much emaciated and the pectoral muscles were practically all atrophied. (See Fig. 3.) The skin

was sprinkled with isolated and grouped nodules varying in size from 1 to 10 mm. in diameter. They are especially numerous on the neck (See Fig. 4), breast, inside of thighs and wings. On the skin over the crop extending back along the median line to the sternum, and about the cloaca, were thick masses of tubercular nodules. Large masses were beneath the right eye, also. In all cases the nodules were confined to the skin proper, the subcutis and muscles not being involved. The tubercles seemed, in nearly every case, to be at the root of the feather. The tubercles were en-cased in a membranous capsule and on section



Fig. 3.

appeared to consist of a whitish semi-solid substance which was easily expressed by pressure. The internal organs were normal.

Tubercle bacilli were readily demonstrated in the various lesions from time to time by stained smears and in sections. Cultures were likewise obtained. Mention of the avian tubercle organism immediately suggests several important questions about the relation of avian to human and bovine tuberculosis, but the writer is not prepared to discuss these topics at present.

In considering the possible hygienic significance of fowl tuberculosis, the desire is awakened to

know whether or not the organisms are present in the egg. It appears to be true that hens badly infected do not lay. In the thirty post mortems of tuberculous hens that have come under the writer's observation, but one hen contained an egg in the oviduct. The thorough cooking to which poultry is subjected renders rather remote the possible danger of human infection by ingestion. Careful observations to determine if newly hatched chicks suffer from tuberculosis will throw light on the question of tubercle bacilli in eggs.

The tuberculin test apparently is not available for diagnostic purposes. About twenty tuberculous hens have been tested with varying doses of tuberculin from a manufacturing house and that prepared by the New York State Veterinary College, without satisfactory change in temperature. Some tuberculin is being prepared from a culture of the avian tubercle organism. Should the tu-



Fig. 4.

berculin test prove successfull on hens its use would have to be restricted to the laboratory. It would be hopelessly impracticable to attempt to weed out tuberculous hens because of the great number of individuals flocking together under the conditions obtaining in the poultry industry in California. Under these circumstances all the individuals of an infected flock must be regarded as possible sources of danger to healthy birds. Taking advantage of the experience in the control of tuberculosis in cattle, we can rest assured that a flock of healthy birds can be raised if constantly kept from contact with tuberculous birds and on land that has not recently been contaminated with diseased ones. The useful life of a hen is so short that there is justification for believing that such a procedure would, in three or four years, result in the eradication of the disease.

In some chicken ranches where the disease is prevalent, all the available land is already utilized

for fowls, which fact would necessitate fencing off a piece of the infected land for separating the young stock from the old infected ones. Such a procedure would involve the disinfecting of land and buildings. Buildings could be readily cleansed by some of the creolin preparations already employed against mites, but the disinfection of extensive areas of land offers a more serious, but by no means insurmountable, obstacle. Sunlight can be depended upon in time to kill the tubercle bacilli in the surface layers of the soil, but just how quickly this can be accomplished remains to be determined.

It is believed that the spread of the disease among flocks of diseased fowls might be lessened by weeding out all hens that are poor and have pale combs. These might be kept in a separate enclosure until their gradual decline or recovery decides the question whether or not they are diseased.

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THE DUCTLESS GLANDS.*

By W. E. UPTON, M. D., Napa.

THE ductless or vascular glands elaborate materials which produce through the circulatory system definite influences over remote parts. Some of these chemical materials are highly antitoxic and necessary for the preservation of life. Thyroid medicinally given internally, produces increased activity of combustion throughout the body, and in certain conditions much loss of weight. Myxedema gives an example of increased metabolism when thyroid gland is given. This increase of metabolism does not occur, however, in all who take it. The best effect is where there is a condition of obesity with myxedema. Thyroid extract has been administered successfully in myxedema, which is due to absent or inactive thyroid, characterized by lowered temperature, impaired intellect, memory and speech, skin thick and dry, with shedding of epithelium. Under thyroid treatment myxedema patients soon improve. The normal temperature returns, intelligence, memory and speech are restored and thickening of the skin disappears; which return when the remedy is stopped. Cretinism is congenital myxedema, and has improved under thyroid treatment, but returns with suspension of treatment.

Thyroid gland given in cretinism is very active, and the patient becomes reduced in size at

first by loss of unhealthy fat. There is increased appetite and improved digestion, then gain in weight, in healthy, firm tissues, soft moist skin the gradual improvement of brain tissue and mind. Simple goitre is often greatly benefited or cured by thyroid treatment. In many skin diseases it also has given good results and it has been recommended for many other diseases. Symptoms of thyroitis are tachycardia, depression, glycosuria, albuminuria, exophthalmos and irritability. Thyroid is contra-indicated in tuberculosis and heart disease.

Very little is known of the function of the spleen. The substance of the spleen has been used in various disorders of the blood, the idea being to supply to the tissues some material necessary to health. Serious improvement of its functions by disease is usually followed by tissue change and changes in temperature. It secretes some bactericide which is indicated by enlargement of the organ in many acute and infectious diseases, as though working against the germs of disease. The use of the spleen in medicine was suggested by that organ's enlarging in some cases of cretinism and myxedema. In medicine it has been found to aid digestion and nutrition and increase the cutaneous circulation. It gives rise to increased number of red corpuscles, and has proved of benefit in anaemia, also in typhoid fever by producing leukocytosis. It steadily reduces the temperature and is said to quickly restore the patient to normal condition.

Disease of the suprarenal gland is followed by progressive asthenia, bronzing of the skin, loss of digestive power and vomiting. Destruction of these organs is thought capable of causing an accumulation of toxic agents, which is the principal cause of fatigue and general asthenia of patients suffering from Addison's disease. Diseased glands from Addison's disease have been found to be inert. The suprarenal secretion has remarkable physiological properties, and is a local astringent or constrictor and cardiac stimulant. It reduces congestion and hastens the absorption of inflammatory tissue. It has given good results in Addison's disease and in exophthalmic goitre. It lessens the heart beats and decreases the size of the thyroid gland. A toxic substance has been isolated from the suprarenals which is identical with muscle poisons originating in the muscles, a substance foreign to the suprarenal capsules. These organs appear to have the destruction of toxic products as a function.

The thymus gland is active only during the first two or three years of life during rapid development, after which it becomes atrophied. Its physiological action appears to be similar to that of the thyroid gland, except that it is weaker.

* Read before the Napa County Medical Society.

THE PREVENTION OF PERINEAL LACERATIONS.*

By EDWARD N. EWER, Oakland, Cal.

THIS paper is not written for the purpose of exploiting any special method for the prevention of perineal lacerations, but rather to call attention to the bearing upon the subject of certain more or less neglected obstetric procedures.

Descriptions of contrivances and maneuvers for application only at the end of the second stage of labor have formed the bulk of the journal literature on the preservation of the perineum for many years, but it is notable that only a very few such measures have secured a position among the accepted obstetric methods. The others have been useless, and some, especially those which consist of manipulations with the rectum and at the vulval orifice, with the possible exception of the little operation of episiotomy, are positively harmful. The fact that no such universal method exists, does not relieve the obstetrician of the obligation which rests upon him. The obstetrician is the general practitioner. He is the benefactor of the gynecologists, but the writings of these gentlemen do not indicate that they appreciate the benefactions, for they continually refer to the obstetrician in terms of reproach for his sins of omission. There are two ways by which the obstetrician can escape this just criticism. He can give more attention to preventive measures and he can do more to repair the injuries at the time they occur. During the last few years tears of the perineal body show upon the surface are generally repaired at once, but vaginal lacerations, often involving the muscles of the pelvic floor, are as frequently neglected. These should not be left to the gynecologist. He is evidently having difficulty with them, if we may judge by the frequency with which new operations for their repair are described in the journals.

There are considerations which tend to prevent the prophylactic side of the subject from receiving the care that it should. The general practitioner considers obstetrics the burden of the profession. It is poorly paid and he has been accused of neglecting it on that account. Certain it is that the gynecologist is better paid for repairing the damage than the obstetrician is for preventing it, or for immediately repairing it.

As a matter of fact, barring careless instrumentation, severe perineal and vaginal lacerations (the ones which present difficulty in the immediate repair), are nearly always caused by some abnormality in position or in presentation, or in disproportion between the child and the maternal pelvis. It behooves the obstetrician to study each case with care and render the proper artificial aid at any and all points where nature fails to preserve the normal mechanism. He

should even remember the possibility of disproportionately large babies when he is giving the pregnant patient her first instructions at the time she acquaints him with her condition. The usual history should be taken and special attention given to the character of previous confinements. If she has had children of over average weights, she should be given instructions regarding the proportions of the foodstuffs which should be present in her diet to rectify this tendency. I am satisfied from my own experience that much can be done along this line, and that much will be done as soon as the profession becomes divested of the belief that any restriction of the mother's diet is attended with danger to the child. Williams (1) crediting the investigations of Prochownick and Florschutz states that a diet poor in carbohydrates and fluids exerts a marked influence upon the weight of the child without otherwise affecting it, and in not a few cases these precautionary measures may obviate a difficult delivery or even do away with the necessity for the induction of premature labor. I always advise a restricted diet to patients who have borne excessively heavy babies, to those who have slight pelvic contractions, and to all primiparae. The carbohydrates and fluids are greatly decreased, fruits are allowed in large quantities and the proteids are little if at all diminished. I have seen several babies of under average weights which I believe I am justified in ascribing to such dietetic treatment of the mother, and in each instance the delivery occurred without lacerations and was not unduly rapid. Furthermore, the children were strong and their weights between the fifth and sixth months exceeded the normal proportion of twice that at birth.

I am fully aware that investigations as to the dietetics of pregnancy are insufficient to establish it upon a thoroughly scientific basis, but enough is known to warrant the belief that more exact knowledge favorable to this kind of treatment, will be gained. As one investigator (2) remarked, we know enough to be sure that a relationship *does* exist between the nourishment of the mother and the development of the fetus, and between the condition of the mother and the character of the confinement, and this being so it is as justifiable to attempt to influence the character of the labor through the nourishment of the mother as it is to administer chloroform, ether or narcotics to ease the labor pains.

I would say nothing about the management of normal first and second vertex positions in the second stage were it not for the high percentage of lacerations authors give for all labors. It is generally stated as 30 to 40 per cent. As 90 per cent of all labors are normal so far as position of child and length of labor are concerned, the proportion of tears for this class of cases is al-

* Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1908.

together higher than need be. The technique, as usually taught, should accomplish much better results than this. The two cardinal points in the management are first, the maintenance of flexion until the occiput has reached the lowest possible point below the pubic arch; and second, chloroform anesthesia to the surgical degree when the head is about to extend. The posture of the patient is important, as it must be one which will afford the operator complete control of the advancing head. This is utterly impossible with the patient in the dorsal position lengthwise of the bed. There are only two proper positions and these are the left lateral, and the dorsal-across-the-bed, with the hips at the edge and the legs held by two assistants. The left lateral position is decidedly the more practicable. With the patient in this position, the hips at the very edge of the bed and the legs partially flexed, the operator controls the advancing head with the fingers of the left hand on the occiput, reached by passing his left hand over the patient's abdomen, and between the thighs from the front. His right hand is idle, but ready to assist when extension is about to take place. If the perineum is not firm enough to hold back the sinciput, and thus keep the head flexed until the occiput is sufficiently advanced below the pubic arch, the right hand should assist by exerting some pressure over the anus. No pressure should be exerted over the perineum itself between the anus and vulva and no manipulation of the vulva orifice is allowable. When the prominence of the occiput has been delivered beyond the pubic arch, the heel of the hand is placed between the tip of the coccyx and the anus and the head crowded forward with due regard for the integrity of the tissues about the clitoris. This pressure behind the anus will produce extension, which must proceed slowly and be controlled perfectly by the left hand on the occiput. At this time the best results are obtained when the perineal muscles are relaxed as much as possible by complete chloroform anesthesia. There need be no fear of *post partum* hemorrhage after this use of chloroform. If, however, there is any reason why chloroform cannot be given, the head should be extended and delivered between the pains. The shoulders are carefully delivered by allowing the anterior one to pivot against the pubic bone after rotation, while the posterior is delivered. This method with the natural lubricant should not be attended with more than 10 or 12 per cent of lacerations, and it should be rare for one of these to be beyond the first degree. I am tempted to say that a complete laceration need never occur under such conditions. Such minor lacerations, with two or three silk-worm gut sutures heal very nicely; as well perhaps as clean perineal or episiotomy incisions.

The operation of episiotomy is, however, deserving of some consideration in a paper such as this. It would be of greater value if it were possible to know in any given case that laceration is inevitable. If properly performed, it will cause no harm, and if done whenever the operator feels certain that his other measures will fail, it will be sure to prevent some bad tears. It should be done according to Dickinson's (3) directions. The cuts about one inch long and a quarter inch in depth, severing the resisting band which is felt about one-half inch within the tense edge of the vulva. The important point in the operation is to make the cuts parallel with the long axis of the woman's body, and not at right angles to the edge of the vulva as it is being distended by the head. As usually performed, the posterior ends of the incisions are found after labor to approach each other on the posterior wall of the vagina, thus enclosing a triangular space containing the perineal body. In that case, the damage might be as great as in the ordinary second degree tear, and involve the same structures. Instead of approaching each other, the incisions should be found to be parallel after labor. They are easily united with running sutures of fine catgut.

Twitchell lays great stress upon the preservation of the natural lubricant during the process of the labor. If this slippery material is repeatedly removed by too frequent digital examinations, or by douches, perhaps containing astringent antiseptics, the head will not slide as it should on the perineum, but will push it forward, thereby diminishing the distance from the tense edge to the pubic arch and favoring laceration. Hot douching during the first stage is sometimes recommended to relieve spasm of the cervix, and to increase uterine force. The cervix will dilate if the head advances properly flexed through the superior strait; and if the position and pressure are incorrect, no amount of douching will assist the cervix to dilate. The uterine force can be augmented by better means than the hot douche. It is quite customary when forceps are to be used to scrub out the vagina carefully with a piece of antiseptic soap and then copiously douche with lysol or creolin solution, which is supposed to replace the natural lubricant washed out. It will not do so. Asepsis is necessary, and operative interference has generally been held to be an indication for douching, but Bretschneider's often quoted study seems to disprove it. Of 256 operative cases 119 were douched during labor, and 35 per cent had some fever, while of 135 not douched 29 per cent had fever. If douching is not necessary, then, to secure asepsis, its only effect is the deleterious one of washing out the natural lubricant just before the forceps are applied, when it is most needed.

In the 10 per cent of abnormal labors, assum-

ing that that is about the usual proportion, the common causes of delay are abdominal inertia, overgrowth of the child and arrested posterior positions of the vertex, all of which have the effect of prolonging the second stage, and thus materially increasing the danger of injury to the structures in the pelvic floor. These conditions will generally demand the use of forceps, and the manner of their use is of great importance to our subject.

Beatty of Dublin in the early part of the last century was challenged to fight a duel for writing a paper in which he stated that the proper and timely use of forceps was unattended with danger to the child or mother. It is a well recognized fact that in protracted second stages many lacerations can be prevented by extracting the head with instruments before the vagina has become bruised and dry. One author says it is a good rule not to use forceps in a primipara until she has been twenty-four hours in labor, nor in a multipara till she has been in labor twelve hours. The time element in the indication for forceps has reference to the second stage, and not to the total number of hours the patient has been having labor pains. It is a better rule to assist with forceps if distinct and continuous progress is not made within two or three hours after the cervix is fully dilated. If careful, slow and intermittent traction in the axis of the canal extending over at least twenty minutes, and without douching the vagina, be made at this time, the results to the maternal soft parts will be far better than they will if the head be allowed several hours longer to mold through the pelvis.

In regard to forceps, I wish to urge the use of the axis traction instrument. I am convinced that it should be used, as advised by Milne Murray, in every forceps extraction, whether the head be at the superior strait or at the pelvic outlet. It is only half-heartedly recommended by American authors for the medium or high operation. It is of as much or more use when the head has reached the pelvic floor. With it, extension will never be begun until the occiput has been brought below the pubic arch. It should not be removed until the whole head is born. I have seen at least two tears into the rectum made by improper traction with Elliott's forceps in the hands of men who had used them many times before. It may be argued that this was not the fault of the forceps, but if they are so often used wrongly they should be discarded for an instrument which has its own indicator for proper traction, attached. Many operators will decide that their traction has never been perfect after their first use of an axis traction instrument. The objection seems to be that it is complicated, cumbersome and hard to use. If this objection is valid when applied to the Tarnier forceps, it is not

valid with the one known as Neville's. It is commonly used in Ireland, and has been preferred at the Rotunda in Dublin for a number of years. The blades are of the Barnes shape, and have Neville's apparatus attached. The traction apparatus is entirely outside the vagina when the forceps are applied, and it can be detached in an instant when desired. There is an arrow indicator at the joint in the traction rod which is parallel with the Fenestra of the blades, and when the force is exerted in a line with the arrow, true axis traction is the result. I believe that this instrument will save many a perineum if used instead of the ordinary forceps.

Among the various abnormal positions which may become factors in the causation of bad tears I have encountered the occipito-posterior most frequently. If this position be found, the probability is that the labor will be long, that the soft parts will become edematous, that the lubricating secretion will be absent, and that the great distention of the perineum when delivery is accomplished with forceps, by overflexing the head and then extending it, will result in extensive injury to the soft parts. I have managed eight persistent occipito-posterior positions in this manner, and while none of the children were injured, the effect on the perineum was not satisfactory. No complete ruptures occurred, but lacerations to the second degree were generally present. The treatment which seems to be attended with the best results is anterior rotation with forceps. The textbooks unanimously condemn it, but they offer nothing which gives anything like the results reported by those who use it. The American Text-Book states that it rarely succeeds and is capable of serious injury to the child, but Richard C. Norris (4), the editor of the book, rather enthusiastically recommends it in other writings, and his detailed description of the technique I would recommend to those who, like myself, are not satisfied with direct traction and wish to try it. Brodhead (5) and others of New York advise and practice it, and report excellent results. Briefly, the method is to bring the head to the pelvic floor, if it is not already there, with an axis traction instrument, and then rotate the occiput to an anterior position, preferably with the Tucker solid-bladed forceps. To prevent lacerations of the vaginal walls, the tips of the blades must be kept in the axis of the canal, and this is done during the rotation, by deviating the handles of the forceps in the direction toward which the concavity of the pelvic curve of the instrument is directed. The head is held in the new position until the body rotates, and then the forceps are re-applied to the sides of the head and delivery completed. Of course this procedure is only applicable when the longest diameter of the head has passed the superior strait. If the head will

not engage at the brim, the true high forceps operation would be necessary, and that I believe to be bad practice. Version is to be preferred.

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DISCUSSION.

Dr. Z. Malaby, San Francisco—There is very little left to be said about this paper of Dr. Ewer's. He has covered the subject very completely and I heartily agree with him in everything except the last—rotation of the head with the forceps. With the right hand make strong pressure against the head during the pains. I frequently hold the head for fifteen or twenty minutes and cannot help but notice the good results of each pain by this method. From the doctor's paper I would infer that he would give chloroform in all cases while the head is passing over the perineum, especially the likelihood of a tear. I would like to ask if he always follows that method? About three years ago this subject was brought up for discussion, and some advocated lubricant oils. I think that nature helps more than all else in these cases. The tear in the perineum is caused from the shoulders; very often when the head is being delivered, the two shoulders are presented at the same time. I have frequently seen tears caused from this. I therefore, after the head is delivered, if the cord is not around the neck, see that one shoulder is pushed back and the other one delivered. Regarding the rotation of the head with forceps, it takes an expert to rotate the head in that way and not lacerate the head in several places. In a well equipped hospital or an up-to-date house with a physician who has had considerable experience in using the forceps, it may be a good procedure, but as a general routine, I certainly would not advocate it for rotating the head.

Dr. W. N. Sherman, Fresno—I want to speak of one point in regard to the delivery of the shoulders. After the head is delivered and the rotation has taken place, the head should always be elevated with the hand, and the upper shoulder held back behind, while the lower one is born. This is the method I have adopted for many years and have saved many accidents in that way.

Dr. F. P. Topping, San Francisco—I would like to say one thing advocating the left lateral position. It is used entirely at the Rotunda Hospital, Dublin. When the head is on the vulva the parts are pressed back, therefore we can further aid the distention of the outlet. In some cases we get very good results by using a pad at about 118° kept constantly on the perineum between the anus and the vulva. There was one other point about the axis traction. In Dublin they never use long or straight forceps; it is always the Nevel's forcep. The advantage is that the axis traction is entirely without the pelvis. It is very low down and there is only one point to watch and that is the arrow indicator which, kept within a certain line, will always give true axis traction.

Dr. A. S. Parker, Riverside—I would like to speak of the use of the ordinary forceps to get axis traction. In place of taking the handles, I slip my finger between the blade, catching them higher, and with good strength in the hands you can use traction on most forceps by catching them high up. In any ordinary case you can get as much traction as is necessary. You have much better control of the movements of the head than pulling.

Dr. D. A. Hodges, San Francisco—There were so many excellent things in the papers that it is hard to discuss them. There is one subject I would call

attention to and that is in regard to the delivery of the shoulders. I believe myself that the shoulders are the cause of lacerations of the perineum. Frequently after the head has been delivered, the perineum relaxed and the body allowed to rotate in the antero-posterior position, the obstetrician places one finger in the axilla and the shoulder plows its way through the perineum. One way to prevent that is to prevent the extreme rotation of the body. Remember the various mechanisms of flexion and rotation of the occiput to the front and after extension then external rotation. The occiput should be allowed to come back to about the position already occupied. If you permit the head to rotate too far, then you have the shoulders in the anterior posterior diameter. But if you permit it to rotate so that it occupies the position it did and the shoulders come down in that diameter, they do not rotate to the extreme and instead of passing over the central portion, pass to the right of the perineum.

Dr. J. Maher, Oakland—From my experience my belief is that if perineal lacerations occur it is after the head has been delivered. I think the shoulder is responsible for this. When the head is delivered, the whole weight of the child comes upon the shoulder. I believe the way to prevent this is by taking hold of the head with the left hand and at the same time support the perineum with the right hand.

Dr. E. N. Ever, Oakland—Dr. Malaby asked if I would use chloroform in all cases. I certainly would to a moderate degree in every case, whether there are lacerations or not, principally to save the woman pain. I have delivered many cases that way. In regard to Dr. Malaby's criticism as to rotation of the head in anterior occipital rotation, one reason I rotate the head in that way is to prevent laceration. I have never used that method until recently. I recommend it principally from the writings of well-known men whom I have studied very carefully. Recently I have had occasion to use it and was astonished at the ease of it.

INFECTIOUS PULMONARY EDEMA.

PRELIMINARY REPORT.*

By W. OPHÜLS, M. D., San Francisco.

WHILE I was studying mixed infections in pulmonary tuberculosis, I met with a condition which, to the naked eye, had all the appearances of an acute pulmonary edema such as we are accustomed to see in cases of disturbance of the circulation in the lungs. It nearly always occurred in the posterior lower parts of the lungs, and involved large parts of the lower lobes in a diffuse manner; the pleura over the affected parts had a smooth, shining surface. The cut surface was dark red, often clearly bluish in color, and smooth. On pressure a clear, slightly blood-stained foamy fluid was discharged from the pulmonary tissue. There was an increase in consistency of the lungs, but not enough to speak of a consolidation. On microscopical examination one found in these cases a marked hyperemia of the septa, the air spaces more or less filled with coagulated fluid, desquamation of the alveolar epithelium, no or very few polymorphonuclear leukocytes, and in other words, a typical edema. Yet when one stained the specimens for bacteria, the edematous fluid was found to contain them in

* Read at the Thirty-Third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

very large, often enormous, number. The bacteria encountered most frequently in such cases were the pneumococcus and streptococcus, both of which are known to produce inflammatory edema in other parts of the body. The conclusion, therefore, was nearly unavoidable that the edema in these instances was an infectious one and not produced by disturbances in circulation. These observations led me to make a systematic study of all cases of pulmonary edema that came under my observation. It is the purpose of this paper to give a short report of the results of these investigations.

From my material I excluded all cases of pulmonary tuberculosis, as well as all cases in which there were definite pneumonic changes on the side on which the edema was found. In this way I collected among about 100 necropsies performed during the last eight months, 15 cases in which there was an extensive, in most instances bilateral, edema of the lungs. The cases were not selected, but consecutive ones. They embraced the following conditions: Chronic nephritis and heart disease, 3 cases; chronic heart disease alone, 4 cases; cerebral hemorrhage, aortic aneurysm, emphysema, empyema on the other side, cirrhosis of the liver, pernicious anemia, cholelithiasis and carcinoma of the prostate, 1 case each. Among these 15 cases I found only 4 in which the edema evidently was produced by disturbance in circulation: i. e., in which cultures as well as sections were free from bacteria. They were 2 cases of chronic nephritis with heart disease, the case of aneurysm of the aorta, and the case of carcinoma of the prostate. In all other cases bacteria were found not only in cultures from the edematous parts of the lung, but in sections as well, and always in considerable, sometimes very large, number. In 6 of these 11 cases there was no appreciable emigration of polymorphonuclear leukocytes. In one of them the edema was hemorrhagic and in another the very numerous bacteria had produced, in addition to the edema, extensive necroses in the tissues. In the remaining 5 cases a beginning emigration of polymorphonuclear leukocytes was noticeable; in 3 of these the edema was hemorrhagic. In these last 5 cases, of course, there cannot be any doubt that we have to deal with an inflammatory edema produced by bacterial infection. The bacteria found in the eleven cases were either pneumococci (8 cases) or streptococci (3 cases). In 6 cases these organisms were present practically in pure culture; in the 5 other cases non-identified bacilli were found with them, which I have all reason to believe were organisms of putrefaction.

I believe that even in those cases in which there was no emigration of leukocytes, indicating the infectious nature of the process, one may be tolerably certain that the condition was caused by

the presence of the bacteria. In the first place, both pneumococci and streptococci are known to produce inflammatory edema, often with very slight leukocytosis; in the second place, it does not seem very reasonable to assume that their presence in these cases is merely accidental. It is true the presence of pneumococci especially have been demonstrated by culture experiments at times even in healthy lungs, but they were always present in very small number, such small number, in fact, that one would not find them in sections, and the very nature of the bacteria encountered precludes the possibility of their having developed during the time which elapsed between death and necropsy, from a few to the enormous number in which they were encountered in the sections.

From my experience I should conclude, therefore, that the most frequent form of pulmonary edema encountered at necropsies is an infectious edema caused by pneumococci or streptococci. I am well aware that the majority of cases that come to clinical observation are very probably edemata due to circulatory disturbances. In many cases this is proved by their rapid subsidence as soon as the circulation in the lungs is restored to a fairly normal condition. We find the inflammatory edema so frequently, at necropsies, because it is, to my mind, the most frequent form of terminal infection that carries off patients with impaired resistance on account of chronic disease.

In looking over the literature of the subject I fail to find any mention of the infectious edema in any of the common text-books, except in the form of a collateral edema in cases of pneumonia. Orth, even, directly states in his text-book: "*Für die Annahme eines allgemeinen entzündlichen ödems, einer sog. pneumonia serosa, lassen sich Keine genügenden Gründe vorbringen.*" Rivalta (*rev. Centralbl. f. Bact. XVI* 456) describes the occurrence of acute infectious edema in 51 cases of pneumonia. Only Kockel seems to have recognized the frequency of infectious edemata. In a paper read before the Naturforscherversammlung at Frankfort in 1896, he describes cases of pulmonary edema following injuries to the head, fracture of the spinal column, typhoid, etc., in which he found streptococci, pneumococci and staphylococci in the lesions.

The infectious edema, then, would manifest itself anatomically in a diffuse hyperemia and edema of the posterior parts, usually of both lungs. It may be regarded as an abortive form or the forerunner of catarrhal pneumonia, i. e., those forms of pneumonia in which we have a more or less turbid serous exudate and which produce the condition that is known as splenization of the lungs.

THE EYES OF SCHOOL CHILDREN.

At the last annual meeting of the American Medical Association, the House of Representatives, on the recommendation of the Ophthalmological Section, passed the following:

Resolved, That it is advised by the American Medical Association that measures be taken by the various school authorities and boards of education, boards of health, and if possible, state legislators, to secure examinations of the eyes and ears of all school children in this country, with a view to the suitable treatment for the relief of the ophthalmologic and otologic imperfections.

In accordance with this resolution Prof. Geo. L. Leslie, of the Los Angeles High School, has prepared the following leaflet for the use of the teachers of Los Angeles:

Los Angeles City Public Schools,
October, 1903.

SCHOOL HYGIENE LEAFLET.—EYE-SIGHT OF PUPILS.

THE EYE—NORMAL ACTION, DEFECTS, TESTS, HYGIENE.

"The average person knows little about his eyes. Perhaps he does not need to know much about them, but he should know at least this much. He should understand the action of the eyes; what eye defects are and what they mean. Knowing this, he is guarded against serious eye dangers."

THE NORMAL EYE.—In the normal eye rays of light from distant objects are brought to a focus on the retina without action of the muscles of accommodation. The focal length of the lens equals the axis of the eyeball. The eye is at rest when looking at distant objects.

Without *change of the lens* the focus of rays of light from near objects is behind the retina. That the image be sharply focused upon the retina, the lens must become more convex.

The lens continually changes its convexity as the eye looks at far and near objects.

The normal eye maintains such change without fatigue.

The eye in infancy is an undeveloped eye composed of growing tissues: the flat eye, underfocused. It is not adapted for *near work*. Development proceeds at an *uncertain rate*. The developed form of the eye precedes the full growth of the body by only a few years.

The relation of the nervous mechanism of vision to other nerve centers is so vital and close that the observance of proper hygienic condition of the eyes is most important to the general health and development of children and to the working ability of adults.

ACCOMMODATION.—In principle the eye is an optical instrument like the photographic camera. They differ in this: In the camera the convexity of the lens does not change. For objects at different distances the ground glass of the camera changes its distance from the lens.

In the eye the *distance* from the lens to the retina remains unchanged. The lens continually changes its convexity as we look at objects at different distances. The change in the convexity of the lens (*accommodation*) is brought about by the ciliary muscle and suspensory ligament. The lens is held in place by the suspensory ligament, the tension of which is controlled by the ciliary muscle. By the contraction of the muscle the ligament relaxes and the lens, by reason of its inherent elasticity, bulges forward and becomes more convex.

When the lens is at its flattest, it is said to be accommodated for distance vision. When the lens is at its greatest convexity, it is said to be accommodated for the *near point*.

In children the power of accommodation is remarkable. The near point is about three inches from the eyes. At ten years the near point commences steadily to recede, but holds during adult life, to the age of forty-five, at from twelve to fourteen inches.

Reading, writing and all near work are effected by muscular exertion causing an increased convexity of the lens.

DEFECTS.—(1) **Hyperopia** (far-sightedness): The flat or undeveloped eye.

The axis of the eye is too short.

Rays of light from distant objects come to a focus behind the retina. If the eye is at rest the images, even of distant objects, are blurred.

The eye is never at rest during waking hours. Continued eye strain exists.

Where hyperopia is marked, by reason of the short axis of the eye, the face shows a want of relief.

Accommodation is strong and distant vision may be maintained without apparent fatigue. Pupils see board-work well.

Near vision, however, gives rise to fatigue.

Children read well at the beginning of a paragraph, but blunder toward the end. They may seem inattentive. Pupils with this defect tend to exhibit an unusual amount of blinking and winking.

Headaches, redness and soreness of the lids, inflammation of the eyes often exists.

This continued eye strain reduces the circulation, diminishes the nutrition, and thus takes away the energy which would otherwise go to aid in the normal development of the eye and in the doing of useful work.

(2) **Myopia** (near-sightedness): The elongated eye.

The axis of the eye is too long.

Rays of light from distant objects come to a focus before they reach the retina. A short-sighted person sees clearly at a definite distance; it may be a few feet or only a few inches. Everything beyond this point is hazy and ill-defined.

It is by far the most important condition of the eyes to look after, because the school work is more or less responsible for it. It is a condition very largely induced by the *misuse of eyes* during the *period of growth*.

A near-sighted child reads well from the book, but does not see the board-work well. He may make all sorts of awkward mistakes. It is most common between the ages of ten and fourteen.

That which is to be particularly avoided is the employment of the eyes at *fine work at short distance*. The continued and almost continual convergence of the eyes of a near-sighted person in time gradually elongates the eyeball. This increase in the length of the axis necessitates that all work be brought a little nearer than before, and thus myopia increases, and continues to increase. This continual eye strain reduces the circulation and consequently the nutrition. Where myopia is at all marked, serious and far-reaching consequences result in middle age and later life.

The remedy is the wearing of proper glasses, relieving the eye strain and giving the eyes an opportunity to *normally develop*.

Children and older persons who are near-sighted usually stoop and become round shouldered from their habit of poring over their work. This stooping at near work tends to produce congestion of the eyes.

Near-sighted persons usually show a prominence of the eyeball, but not always. The forehead shows wrinkles or furrows. Near-sighted eyes are *weak eyes*.

of poor resistance and in a majority of cases continually giving trouble.

(3) **Astigmatism:** In astigmatism the eyeball is not spherical. The eyeball has a greater curvature in one direction than in some other, usually at or near the vertical and horizontal meridians. Because of this unequal curvature the focus may be either in front or behind the retina or both, but by different amounts. Marked cases of astigmatism give rise to much trouble, but nearly all eyes are slightly astigmatic, and the eye overcomes minor defects without trouble.

(4) **Muscular Imbalance:** The eyeball is moved by six muscles. The superior, inferior, internal and external recti and the superior and inferior obliques. When these muscles are rightly balanced the visual axes of the two eyes meet at the point of observation. When muscular imbalance exists this is not true without eye strain. The results of eye strain due to such unbalanced condition of the muscles are severe and far-reaching in their effects on the general health.

The cause of muscle deviations is usually some refractive error. The wearing of properly fitted glasses is the first thing to be done.

(a) When the internal recti are not sufficiently strong the eyes tend to turn outward—exophoria.

(b) When the external recti are not sufficiently strong the eyes tend to turn inward—esophoria.

(c) In vertical deviations, the eyes do not cooperate in upward and downward movements by reason of insufficiency of the superior or inferior recti muscles.

TESTS.—(1) General.

Find out whether there are symptoms of eye trouble, headaches, watering of the eyes, red or swollen lids, fatigue in reading, reading with the book too close to the eyes, trouble in reading work at the board, strained look characteristic of weak eyes; eyes too prominent or eyes seemingly set too far back in the sockets; wrinkles or furrows on the forehead; general poor health.

(2) Snellen's Test Types.

(a) Hang the card in a good light on a level with the child's eyes.

(b) Test one eye at a time, keeping the other eye open and properly covered. (Place a piece of cardboard in front of the eye). Do not allow the child to press or touch the covered eye with the hand. It is customary to test the right eye first.

(c) Have the child take a seat twenty feet from the card. Ask him to read the rows of letters on the card, commencing at the top. Note the lowest line read correctly. If the child cannot read let him paint or draw the letters which he sees clearly.

(d) Write the record of the child's vision in the school register with a visual fraction 20/20 if the vision is normal.

Distance from the chart.

The visual fraction— d/D —Type read.

The numerator is the distance of normal vision for the type marked 20 feet.

The denominator is the distance of normal vision for the type read.

If the pupil reads the type marked 20 feet at 20 feet distance, the visual fraction is 20/20.

If he reads the type marked 30 feet at 20 feet distance the visual fraction is 20/30. The vision is poor, for he should read that type at 30 feet distance. Any fraction less than 20/30 indicates defective vision.

NORMAL VISION.—If the child reads all the letters or more than is expected, his eyes are probably in good condition. His visual fraction is 20/20.

Note: The child may be far-sighted and astigmatic to a considerable extent and still seem to have the normal vision. The accommodation of children is so strong that they readily overcome for a time a small or even medium amount of Hyperopia (far-sightedness). To detect Hyperopia where the vision seems to be normal:

Hold before the eye a one-half diopter convex lens. If the pupil sees as well with the lens as without it (not necessarily better) he is far-sighted. In testing the eye without the lens the defect was hidden by strong accommodation. If the lens dims his vision the eye is normal. Neither the normal eye nor the near-sighted eye will accept any convex lens for distance.

If no lens be at hand then the child's health and his behavior with regard to his work are the only guides at the command of the teacher. Such pupils require most careful consideration. If at any time, there is reason to believe there is trouble with the eyes, a good oculist should be consulted at the earliest moment.

DEFECTIVE VISION—The pupil does not readily read the lines indicated for normal vision. His visual fraction is 20/30, 20/40 etc., or he may be unable to read the types at all.

Myopia—Bring the pupil nearer to the chart. If at some definite distance the letters stand out clear and sharp, are easily read without special effort, then the child is near-sighted, except where there is spasm of the ciliary muscle.

A child markedly far-sighted may have undergone so much strain of the ciliary muscle that spasm of the muscle occurs at times. In the endeavor the eye makes to accommodate itself for near objects the muscles eventually refuse to relax. Under such circumstances a far-sighted eye may appear to be near-sighted.

Hyperopia—If upon approaching the chart no distance is found at which the types stand out clear and sharp and are easily read for any length of time, then the pupil is far-sighted (except in case of spasm of the ciliary muscle).

A far-sighted person upon coming nearer the chart may see the letters plainer by reason of nearness, but the types will not stand out clear and sharp and remain so for any length of time. When nearer the chart the increased intensity of light may momentarily stimulate his accommodation so that for a moment the types will seem plain, but they will not remain.

In distinguishing between near and far-sighted eyes it is well to remember that the near point for near-sighted children is much nearer than in the case of those far-sighted.

The correction for myopia and hyperopia with proper glasses cannot be too strongly emphasized. Glasses give the eyes a chance to develop normally. Near-sighted eyes will only get worse if left to themselves. Again, the cause of muscular imbalance is usually some refractive error and the wearing of proper glasses relieves and prevents muscular trouble. Consult a good oculist at the earliest moment. It may not be amiss to add a word of explanation with reference to the test types.

It has been determined that the smallest retinal image perceived by the most sensitive part of the retina corresponds to a visual angle of five minutes ($5''$). The test types are so constructed that every letter at its proper distance subtends an angle of five minutes. No. 20 type at 20 feet, and 30 type at 30 feet, etc.

(To be continued next month.)

An International Congress of School Hygiene will be held at Nuremberg, Germany, on April 4-9, 1904. All persons interested in this subject are eligible to membership, after approval by the local committee. There will be ten sections. The American members of the committee are President Nicholas Murray Butler of Columbia University, Professor W. T. Porter of the Harvard Medical School, and Professor John A. Bergström of the University of Indiana.—Science.

PUBLICATIONS.

International Clinics; Vol. III, 13th Series. With five colored plates, five plates, and thirteen figures in the text. The third volume of the series contains a collection of six papers on Diseases of the Gall-Bladder and Gall-Ducts, in addition to the general matter usually presented in these volumes. John H. Musser treats of the medical aspects, R. D. Rudolph of the causation, symptoms and diagnosis, Charles G. Stockton writes of the diagnosis and medical treatment, F Parkes Weber deals with biliary cirrhosis of the liver, F. Lejars' contribution concerns the indications for surgical intervention, and John B. Deaver writes of the surgery and post-operative treatment. The papers make an excellent treatise on the subject. Additional papers are on the Treatment of Pneumonia, by David W. Finlay; of Gastric Cancer, by Albert Robin; Carbonic Acid Treatment in Rectal Diseases, by Achilles Rose; of Typhoid, by A. Chantmesse. Other papers are on the following subjects: Malarial Infection, Types of Pneumonia, Respiratory Disorder Causing Death, Leukemia, intermediate in type; Myocardial Damage in Rheumatic Fever, Cocaine Anesthesia, General Anesthesia, Asepsis and Antiseptics, Gastrotomy, Intrascrotal Tumors, and the Modern Treatment of Varicose Veins. Philadelphia: J. B. Lippincott Company.

Decent Advertising—It is a pleasure to read the announcement of the *Journal of the Kansas Medical Society* that in future it intends to abide strictly by the rule of accepting only decent advertising and of publishing no reading notices in its reading pages. Slowly but surely the tide is turning. We have simply been deluged with the flood of vile and filthy nostrums, and doubtless thousands of lives have been sacrificed to the conscienceless greed of the man who will start a so-called medical journal, operate it for revenue only, puff and laud any old thing that has cash to back it, thus prostituting his profession and debauching the minds of many unfortunate ones who read his filthy sheet and do not know that he is paid for printing his vile lies—that his published utterances bear the hall mark of blood money upon them. If the journals of all the state societies will adopt this policy of decency, they can soon force the big, and even the biggest, journals to become reputable in their advertising pages.

Transactions of the Medical Association of Georgia, Fifty-fourth Annual Session, 1903. Some of the papers presented in this volume are Post-operative Treatment Appendicitis, Hydrotherapy in Disease of the Digestive System, Retinitis Albuminurica, Carcinoma of the Cervix, Abdominal Surgery in private Residence, Puerperal Insanity, Smallpox, Osteomyelitis, Stricture Anterior Inertia, Hemophilia, Internal Strabismus, Multiple Fibroid with Pregnancy, Bloodless Operation for Hemorrhoids, General Diseases in Relation to the Eye, Spinal Curvature, Gastroptosis, New Silver Salts, Vaginal Route, Unilateral Sweating, Summer Complaint, X-Ray Treatment of Acne, X-Ray Treatment of Tabes, Criminal Kindness, Uncinariasis in Southern States, What is Meant by "Regulars" in the Code of Ethics, Remote Effects of Gonorrhoea in the Female, An Unclassified Fever of the South.

Transactions of the Iowa State Medical Society, Fifty-Second Annual Session, 1903. (No Table of Contents, and a very unsatisfactory Index; otherwise a satisfactory volume. Why in the world do you not publish a journal, instead of this archaic volume of "Transactions"?) Contains papers on the following subjects: Diseases Fallopian Tubes; Retrodisplacements Uterus; Radical vs. Palliative Measures in Gynecology; Extra-Uterin Pregnancy;

Gyn. Neuroses; Medico-Legal Phases Insanity; Relation Childbearing to Insanity; Alcoholism; Traumatic Neuroses; Epilepsy; Preparation for Cataract Operation; Medical Treatment Chron. Otorrhoea; Radical Operation; Normal Labor; Puerperal Septis, Forceps; State Bacteriologic Examinations; Laboratory in Public Health Work; Disinfection in Office of General Practitioner; Diff. Diagnosis Gastric Ulcer and Gall Stones; Surgery Gall-Bladder; Systemic Infection from Gonorrhoea; Functional Albuminuria; Parenchymatous Nephritis; Contracted Kidney; Nephrolithiasis; Heart Affections; Sounds of the Body.

Transactions of the New Hampshire Medical Society, at the One Hundred and Twelfth Anniversary, held at Concord, May 21 and 22, 1903. The volume contains, amongst other papers, Obscure Fractures Near Joints, New Operation for Spina Bifida, Vaccination, Exaphthalmic Goitre, Typhoid Fever, Passage of Renal Calculus, Pleurisy With Effusion, Acetanilid Habit, On the Extensive Use of Proprietary Mixtures, Maternal Impressions, Eclampsia, Quarantine in Diphtheria, are noted in the volume at hand.

Initial Publication, Again. "*The California State Journal of Medicine* is nothing if not plain spoken. Fortunately its editor is a man of high morals and the JOURNAL is kept to the high standard which he advocates. It appears to us that he is a little too exacting when he insists that all papers read at the annual meeting of the State Society should first appear in the JOURNAL of the Society. The utmost freedom has been given to our members in this matter and no dissatisfaction results. *It is probably true, however, that articles read at the annual meetings will obtain a larger number of readers if printed in the State Journal than if printed elsewhere.*"—*Illinois Medical Journal*.

The reasons for desiring initial or simultaneous publication of papers are numerous. A few of them are: 1st, The JOURNAL desires to print medical news not reprints. 2d, It is the record or transactions of the State Society meetings, and as such should contain all papers presented at the meetings. 3d, We believe our own members are more interested in the papers of their associates than are strangers. 4th, The *Illinois Journal* has expressed our sentiment when it says, "It is probably true that articles read at annual meetings will obtain a larger number of readers if printed in the State Journal." 5th, It is very easy to arrange for simultaneous publication, when that is desired. As for "plain speaking"—well, perhaps that is true!

The Animal Parasite Supposed to be the Cause of Yellow Fever. Correspondence relative to the investigations into the subject, and the very material aid rendered the government commission by Mr. J. C. Smith, of New Orleans. Published in *Science*, Oct. 23d, 1903. The correspondence presented shows at a glance that Mr. Smith was used as fully as possibly by the commission, and then very little credit given him for his aid. It is a shame that scientific men cannot be a little—just a little—more broad-minded and less jealous.

Tuberculosis.—Dr. F. M. Pottenger of Los Angeles considers that tuberculosis is the most frequent of fatal diseases and gives tables showing the mortality in different countries. While we have been obliged to discard heredity as a common cause, he thinks we have gone too much to the other extreme and neglected the question of predisposition. Childhood is a period that needs our most earnest atten-

tion, and while we must recognize the possibilities of heredity, most of the trouble comes from environment. Our hope as to the future prophylaxis of tuberculosis largely depends on our attention to this point. Overcrowding is one of the most active causes in rendering the environment unhealthy, and the part played by acute infectious disease, especially in childhood, deserves earnest consideration. He also cautions against over-exercise and over-training as a possible cause.—*Medicine Abs. J. A. M. A.*

A Study of Immunity; Earlich's Side-Chain Theory. F. M. Pottenger, Los Angeles. Read before the Southern California Medical Society. Published in the *Medical News*, Nov. 7th, 1903. Discusses the general subject, theories, etc., and believes that great advancement in sera may be expected in the near future.

Leprosy in Hawaiian Islands. Dr. Augustin A. Crane, in the *Yale Medical Journal*, writes on this subject and makes some very interesting statements. Dr. Crane was for three years Government Physician in the leprosy vicinity and studied the disease very carefully. Dr. Sajous' definition of leprosy is: "Leprosy is a chronic disease closely allied to tuberculosis, acquired by inoculation with Hansen's bacillus Lepre, but only while the system is susceptible to infection through vital adynamia, inherited or acquired." This definition Dr. Crane says agrees absolutely with his observations in Hawaii. The history of various attempts to have the disease investigated by eminent foreigners is interesting and concise, and the facts as observed by the writer make a valuable addition to the literature on this subject. "Of the 874 lepers confined on December 1st, 1902, 794 were Hawaiians, 39 Chinese, 13 Portuguese, 7 Germans, 5 Japanese, and 4 Americans. Of these 533 were males and 337 females. This proportion of about two to one holds good all over the world."

Relative to Maternity Hospitals, Etc.—Chapter CCXXXIX of the Statutes of California of 1903 provides that any person who, without first having obtained a license in writing from the county health officers, conducts any maternity hospital, or who conducts any institution or other place for the reception or care of children, or who keeps at any such place any child under the age of 12 not his relative, apprentice or ward, without legal commitment; or who violates the provisions of this act, is guilty of a misdemeanor. Every such license must specify the name and residence of the person so undertaking the care of such females or children and the location of the institution and the number of females or children allowed to be received. Licenses shall be revocable for any violation of the provisions of the act, or in any case where, in the opinion of the licensing body, such place is being conducted without proper regard for the health, comfort or morality of the inmates thereof, or without due regard for proper sanitation or hygiene. Every person so licensed must keep a register of the names and addresses of all such females, the names and ages of all such children and of all children born on the premises, and the names and residences of their parents, so far as known, and the time of the reception and discharge of such children and the reasons therefor, and also the name and age of every child who is adopted or taken away, together with the name and residence of the person taking away the child; and within forty-eight hours shall cause a correct copy of the register relating to a child who is taken out to be sent to the county board of health or county health officer, as the case may be. It shall be lawful for all health officers, at all reasonable times, to enter and inspect the premises, to inspect the license and the register and to see and visit the inmates.—*Jour. A. M. A.*

The San Pedro, Los Angeles and Salt Lake Railroad has added a hospital car to its equipment, fully equipped with medical and surgical supplies, and provided with an operating room, dispensary, private rooms and a ward.

Lieutenant-Colonel Henry S. Kluburne, Chief Surgeon of the Department of California; Major William Stephenson, Surgeon, and Captain James M. Kennedy, Assistant Surgeon, United States Army, have been appointed a special examining board to meet at the Army General Hospital, Presidio, for the examination of such officers of the medical department as may be ordered before it to determine their fitness for promotion.

Mr. J. Ogden Armour, of Chicago, has endowed with \$100,000 a chair of orthopedic surgery in St. Joseph's Hospital, Omaha, Nebraska.

PERSONALS.

Mr. W. W. Astor has contributed \$100,000 to the British Cancer Research Fund.

Dr. Louis P. Dorais, formerly 1101 Van Ness avenue, San Francisco, has removed to Eureka.

Dr. William T. Barry has located in Santa Barbara, having removed from Salinas, Monterey county.

Dr. A. P. O'Brien of San Francisco has been appointed Surgeon of the First Division, N. G. C., with rank of Colonel.

Dr. George K. Herzog of San Francisco was married on October 7th to Miss Rae Cohn, Rabbi Myers performing the ceremony.

Dr. James F. Smith and Miss Adele Cagliari were married November 5th at St. Ignatius Church, San Francisco, by Father Frieden.

Dr. Francis Frederick Knorp and Miss Elsie Mangan were married October 28th at St. Mary's Cathedral, San Francisco, by Father Coyle.

Professor C. S. Sherrington, of the University of Liverpool, gave the address at the opening of the new medical buildings of the University of Toronto. Professor Sherrington will visit some of the medical centers of the United States before returning to England.

Physicians throughout the country will be surprised to learn that Dr. Frank Billings of Chicago recently underwent an operation for infected gall-bladder, and sorry to know that he has been much run down on account of the pressure under which he has been working for several years. Dr. Billings made a good recovery from the recent operation, and his friends of the coast wish him speedy and entire restoration to health.

Recent removals of physicians in San Francisco: J. Green, from 1200 Mason to 1076 Washington; B. F. Fleming, from 2212 Webster to 2103 Pine; G. W. Fuller, from 2306 California to 2101 Webster; G. E. Ebright, from 590 Sutter to 606 Sutter; R. W. Baum, from 139 Post to 369 Sutter; A. F. Sampson, from 1220 Sutter to 751 Sutter; J. I. Manson, to 1163 Van Ness avenue; H. J. Waterman, to Berkeley; William P. Harvey, from 569 Haight to 751 Sutter; W. C. Stratton, from 2255 Mission to Parrott Building; C. M. Richter, from 640 Geary to 391 Sutter.

DEATHS.

Dr. Alphonse J. Mervy died November 17th at San Diego, where he had gone three months ago from San Francisco on account of failing health. Dr. Mervy graduated from the Medical College of the Pacific in 1876, and was licensed the same year.

Dr. Michael Heinmann, father of Dr. J. M. Heinmann of Fruitvale, died on Thanksgiving day at the age of 85.

MEDICAL SOCIETY MEETINGS.

Alameda County.

The Alameda County Medical Society held its regular monthly meeting Tuesday evening, November 10th, Dr. Hamlin presiding.

Dr. T. A. Williams read the paper of the evening, the subject being "Gastric Analysis in Hyperchlorhydria."

The doctor stated that Hyperchlorhydria was one of the functional diseases of the stomach, and that it is only of recent years that these functional diseases have been studied and placed on an exact scientific basis. After reviewing the etiology, symptomatology, and diagnosis of this neurosis, emphasizing the importance of a chemical analysis of the stomach contents after a test meal had been given, he described the technique of obtaining and analyzing the contents of the stomach.

During the executive session a motion, expressing the following resolution, was made by Dr. F. L. Adams and unanimously carried:

Resolved, That the Alameda County Medical Association hereby endorses the position and action of the Santa Clara County Medical Society, taken relative to the suit against the State Board of Examiners, and hereby pledges the influence and support of this society, individually and collectively, to the State Board of Examiners; endorses their action and appreciates the good they have done and are doing, and insists that there shall be no tampering with the present medical law of this State; and be it further

Resolved, That this County Medical Association urges and calls upon the Trustees of the Medical Society of the State of California to use such funds as may be at their disposal, to employ counsel and to do everything they can to sustain and defend the position in which the State Board of Examiners finds itself at the present juncture.

Committee on Publication:

J. M. SHANNON,
A. S. KELLY.

A. H. PRATT, Secretary.

Kings County.

Kings, Merced, Ventura Counties Organized October 31st, 1903. In response to the invitation sent out by the Trustees, Drs. Duncan, Felton, Dixon, Toner, Holmes, Miller, McCubbin and Charles met Drs. Geo. A. Hare and Philip Mills Jones of the Board of Trustees of the State Society at the Artesia Hotel, Hanford, on the night of October 31st, and organized the Kings County Medical Society. The meeting was called to order by Dr. Jones, and on motion Dr. Duncan was made temporary chairman and Dr. Felton temporary secretary. Dr. Jones presented the constitution and by-laws recommended for county societies by the State Society, and on motion they were adopted as read. The second Monday in each month was appointed the time for regular meetings, the hour and place to be determined from time to time. The following officers were then elected to serve until the annual meeting, in December: President, N. P. Duncan; Vice-president, Wm. H. Miller; Secretary, L. E. Felton. On motion, the roster was left open for charter members until January 31st, 1904. On motion the Secretary was instructed to write to the State Society asking for affiliation. On motion it was decided to meet the second Monday in November at the office of the President, Dr. Duncan. Drs. Scott, Moore and Gregory could not be present, but had requested that their names be placed on the roll of members. The meeting then adjourned, after Dr. Hare had explained the full meaning, purpose and objects of organization, and the duties attaching to membership in the organized society of the State.

It is a great pleasure to the Trustees to congratulate the physicians of Kings county upon the organization of their society, and especially so to note that out of a total of twelve physicians in the county, eleven have placed their names upon the roll of

members. We earnestly hope that effort will be made to secure the one remaining without the fold to also join in the organization, and thus have at least one county in the state in which every eligible physician is a member. We would once more state the fact which you have doubtless already appreciated, that the comparatively small amount which your society will pay to the State Society brings you in a goodly return. You will receive the *STATE JOURNAL* monthly and the *Register* each year—free. The *JOURNAL* will keep you posted as to the doings of your own as well as all other county societies, and the State Society, and will give you much material that you will find of benefit. If your meetings are reported to the *JOURNAL* they will be regularly and promptly printed each month and thus your members will secure, free, a complete set of the transactions of your own society. We ask you to remember that the *JOURNAL* is your own property and will be administered solely in the interests of your members and the members of all county societies. We trust that you may one and all appreciate the great benefits to be derived from the spirit of harmony and closer intercourse which a medical society induces, and that you will strive to make the Kings County Medical Society the strongest component society in the state organization.

Merced County.

Organized November 12th, 1903.

In response to an invitation sent out by Dr. E. S. O'Brien, the following physicians of Merced County met at the Masonic Hall, Merced, on the afternoon of the 12th of November, and proceeded to organize the Merced County Medical Society: Drs. De Loss, Lilley, O'Brien, Rucker, Smith and Whitlock. Dr. Philip Mills Jones, a member of the Board of Trustees of the State Society, was present on invitation of the resident physicians, to aid them in the matter of organization. In addition to those present, Drs. Wade and McClelland had signified a desire to join in the organization, but could not attend the meeting. Dr. O'Brien was elected temporary chairman and Dr. Lilley temporary secretary. The constitution and by-laws recommended for County Societies by the A. M. A., and the Trustees of the State Society, was then read and on motion it was decided to organize a county society under the title of the Merced County Medical Society, and to adopt the constitution and by-laws as read. On motion, the following officers were elected under the constitution to serve until the annual meeting in December, 1904: President, E. S. O'Brien; Vice-President, H. N. Rucker; Secretary, W. E. Lilley; Treasurer, H. De Loss; Censor, for three years, A. M. Smith; for two years, W. A. Whitlock. On motion, election of censor for one year was postponed till the next meeting in December. On motion, the election of delegate and alternate to the State Society was postponed till the March meeting. On motion, the initiation fee was fixed at \$5.00, and the annual dues at \$2.00. On motion, the secretary was instructed to write to the secretary of the State Society enclosing copy of the constitution and by-laws and request that the society be accepted in affiliation with the State Society. On motion, the secretary was instructed to order 100 copies of the constitution and by-laws from the A. M. A. On motion, the first Thursday of each month, 8 p. m., was made the time for regular monthly meetings of the society. On motion, it was decided that the next meeting be held at the office of Dr. H. N. Rucker. On motion,

the society adjourned to meet at 6 p. m., at a dinner provided for the trustee who had been invited to attend the meeting.

Another new county society is thus launched, and very successfully and harmoniously launched. The Board of Trustees congratulate the physicians of Merced County upon their organization, and upon the peace and harmony which prevails in their county in medical circles. It earnestly hopes that this harmony may be continued, fostered and strengthened by the society, and that its influence for good and for the best of professional interests and for public health may ever be exerted by it.

Orange County.

The Orange County Medical Association held its regular monthly meeting November 3d. Dr. J. W. Jones, of Orange, read a very able and interesting paper on "Constipation and Some of Its Effects."

The library committee reported about 300 volumes already contributed to the medical library.

At the annual meeting of the Santa Ana Hospital Association the board of managers was re-elected and Doctors John L. Dyer was elected president; Howard S. Gordon, vice-president; James P. Boyd, treasurer, and Charles D. Ball, secretary. The capital stock of the association was increased from \$10,000 to \$25,000.

H. S. GORDON, Secretary.

Riverside County.

The Riverside County Medical Society met at Dr. Clarke's residence on Monday evening, November 9th. Present, Drs. Kendall, Parker, Clarke, Girdlestone, Van Zwalenberg, King, Dickson, Baird, Martin and Roblee.

The minutes of previous meeting were read and approved.

After much discussion it was voted not to ask the members of the other schools of practice to unite with us in adopting a fee bill. The Secretary was ordered to have the constitution, by-laws, fee bill and roster of members published at the expense of the society in pamphlet form.

Dr. Martin reported a case for advice as to whether an abortion would be justifiable in a patient who had suffered from repeated attacks of appendicitis. The pregnancy is of two months duration; there is much nausea, pain at the site of the appendix, loss in weight and general malaise. The patient has refused operation for the appendicitis. The concensus of opinion was that the appendix should be operated upon and the pregnancy should not be interfered with.

Dr. Dickson invited the society to meet with him next month.

Dr. Clarke served delicious refreshments. A vote of thanks was tendered our hostess and the meeting adjourned.

W. W. ROBLEE, Secretary.

San Bernardino County.

The San Bernardino County Medical Society held its regular monthly meeting Wednesday, October 14th, in the County Court House. In the absence of President Booth the meeting was presided over by Dr. Hurley. Papers were prepared by Drs. Charles Harris, J. J. Myers and J. A. Champion. Several applications for membership were received.

J. H. MEYER, Secretary.

San Francisco County.

Meeting called to order at 8:35 p. m., November 10, President Kengla in the chair. The minutes of the

previous meeting were read and approved by the society. Propositions for membership: Drs. Alfred Morris, Martha Thornwick, Frank Maine, Alva Hewlett.

Dr. Winterberg exhibited case of resection of both bones of the right forearm, made necessary by faulty union. He emphasized a few of the general rules regarding treatment of fractures.

Dr. W. I. Terry showed case of total removal of larynx; the patient using an artificial larynx, invented by Gluck, permitting him to speak fairly distinctly.

Dr. H. P. Hill stated that he was present at an operation for total removal of the larynx, but in that case no artificial larynx was used.

"Diagnosis of Unilateral Kidney Diseases", by Drs. Krotoszyner and Willard, was read by Dr. Krotoszyner. Enumeration of a number of cases, proving great value of catheterization of ureters and the definite aid obtained by the use of kryoscopy and the phloridzin test.

Dr. Grosse congratulated Dr. Krotoszyner on his paper, as it embodied and verified all the latest and best work done by urological specialists, as well as upon the fact of being the pioneer in this work on the coast. He agreed, in the main, with the conclusions of the speaker, but differed with the writer in believing that though catheterization of ureters is very valuable as a diagnostic factor, it is not nearly so simple a procedure as described this evening, nor as innocent a one. Caspar read his first paper on catheterization of ureters in the Berlin Medical Society a number of years ago, and in the discussion that ensued, no less authority than James Israel warned against the use of this measure as a routine procedure, as a healthy kidney could thereby be infected; and to prove this assertion he demonstrated several pathological specimens, germane to the question. Dr. Grosse wished to emphasize the fact that, although Dr. Krotoszyner has, as yet, reported no ill-effects from catheterization, that these will certainly materialize sooner or later. He wished to warn against catheterization of ureters in cases of co-existing urethritis and cystitis. Kryoscopy, which though not very accurate is certainly an aid towards solving the functional capacity of the kidney, and, for that reason, as well as Caspar's phloridzin test, may be considered corroborative evidence.

Dr. J. Henry Barbat—With regard to the different catheterizing instruments, I use the Bradford Lewis cystoscope. I am rather in favor of this instrument, because it gives a direct view of the interior of the bladder. Regarding catheterizing the ureters, either in the male or female, it is an error to attempt the procedure with the patient in the dorsal position; the knee chest position will give much better results and is a much easier position for the surgeon.

Dr. Levin—Regarding the danger of injury to the kidneys, I have heard Israel mention these failures without pointing to the previous damage done to the kidneys through faulty catheterization. To this he attributes the failures. There is never any necessity to insert the catheter so deeply as to reach the substance of the kidney. This I have heard from Israel personally.

Dr. Quinan wished to know if Beekman's instrument was used in the kryoscopic tests and if examinations were made in triplicate. He called Dr. Krotoszyner's attention to the fact that the instrument and the procedure are notoriously faulty and inaccurate.

Dr. Dudley Tait found, upon his recent European trip, that the enthusiasm for cryoscopy noted at the 1900 International Congress, had almost completely subsided. No one, with the exception of Casper and

Kummel, considered cryoscopy a method of precision. Many factors aside from renal insufficiency may influence the freezing point of blood (Albarran, Bernard, Hartmann, Israel). Dominici's experiments prove that the formation of sugar may occur in other parts than the kidney, thus explaining the variable results from the phloridzin test. He made a comparison between ureteral catheterization and segregation of the urines, showing in detail the numerous sources of error, the difficulties to be surmounted, the necessity for safe and simple methods of diagnosis. The elements of precision attributed to ureteral catheterization was contested and numerous arguments given. Operative records in services using segregation (Hartmann, Tuffier, Legueu, Mayo) were frequently better than in those services using ureteral catheterization (Kelly, Kummel, Casper). Albarran's successor, at the Necker Hospital, and the Mayo brothers, of Rochester, use segregation (Harris' and Cathelin's). The latter reported last May 48 consecutive nephrectomies without a single death.

Dr. Grates exhibited a urethral calculus recently removed from a female; diagnosis made with Kelly cystoscope and wax tipped catheter.

Dr. Rosenstern—Methods, such as these, will not be abandoned but probably improved. The removal of a kidney, or in fact, all kidney surgery, is of such importance that any method which will throw any new light on the case is anxiously sought for by surgeons. A report of 400 kryoscopic examinations by Kummel and the conclusions drawn therefrom show that even if the method is not accurate it is a definite aid. A method, not spoken of this evening, is the method of Loewenhardt, Breslau, i. e., the measurement of the electrical conductivity of a fluid.

Dr. Krotoszyn—Catheterization has come to stay. Segregation will be used only in infantile bladders and bladders filled with opaque fluid, which does not clear after repeated irrigations. Kryoscopy is not very accurate but, when there is a very great difference between the two kidneys, it is of a good deal of significance. In nephrotomy it is of great use, as it indicates whether the other kidney will functionate sufficiently for several days.

Dr. Sanford Blum read a paper on "Streptococcus Diarrhea in San Francisco."

Dr. P. K. Brown—Dr. Blum seems unfamiliar with work recently done by Deval, Bassett and Bidder on the dysenteries occurring in the United States, and acute diarrhea of children. They found the bacillus first described by Shiga as causing acute tropical dysentery, is also the cause of the sporadic institutional dysenteries of this country. This bacillus is the cause of a very large proportion of summer diarrhea of children.

Dr. Rykogel—I would like to ask Dr. Blum whether he said that he found streptococci in pure culture, or if he isolated them. We know that the colon bacillus is found almost universally in the intestine and multiplies in diseased conditions.

Dr. Blum—I found the streptococci in one case in pure culture. I wish also to say that I said that intentionally for the reason that unless you find the streptococci in pure culture you cannot be sure it is the guilty organism.

Dr. W. U. Arnold, who was to demonstrate therapeutic electric light apparatus, was unable to do so on account of the accidental breaking of the lamp.

Annual report of Committee on Admissions: 64 members admitted; 6 yet before committee; none rejected.

Annual report of Treasurer: Receipts, \$2113; disbursements, \$2037.93; transferred to Trustees, \$500; on hand, \$212.18.

Annual report of Trustees: Including \$500 from Treasurer and \$225.38 interest, balance on deposit, \$7236.98.

Auditors reported books and accounts correct.

Annual report of Executive Committee referred to aid given by President Kengla in arranging programs, and extended thanks to Drs. Kerr, Allen, Brown, Brunn, Jellinek, Goodfellow, Shieles, Kelly, Sherman, Reynolds, Perry, Johnson, Cooper, Terry, Kibbe, Morton, Grosse, Cohn, Power, Krotoszyn, Stapler, Huntington, Moffitt, Levison, Willard, Blum, Arnold and Winterberg, of the society, and to Dr. Sunberg, of Bagdad, for papers read before the society.

Annual report of Librarian showed 1316 visits to the library, average 110 per month; expense, \$1050; recommended employment of a second assistant in order to keep the rooms open from 8 a. m. to 10 p. m.; also that additional room be provided.

Annual report of Secretary showed present membership of 405; loss of year, 23; gain of year, 74; membership, 1902, 354; net gain, 51; collected dues and fees, \$2113; expenditures, \$2037.93.

Dr. Philip Mills Jones presented the following notice:

"In accordance with Article IX of the Constitution, I beg to herewith file notice to the effect that at the next regular meeting of this society motion will be introduced appropriating the sum of \$300 to be paid to the Medical Society of the State of California, as a contribution to the fund to be collected from component county societies for the defense of the suits against the Act entitled 'An Act to govern the practice of medicine in the State of California,' and against the Board of Medical Examiners as appointed under that Act."

On motion the Secretary was directed to cast a ballot as that of the society in favor of the election of the officers placed in nomination at the last meeting to serve for the ensuing year, there being no additional nominations presented.

President Kengla thereupon declared the election of the ticket nominated by the special committee, as printed in the November STATE JOURNAL, page 382, and after thanking the society for the honor it had conferred upon him, introduced the President-elect, Dr. J. Rosenstern, who accepted the chair in a short address, saying he had no new policy to propose, but would endeavor to follow the excellent example of his predecessor.

On motion of Dr. Ebright, the thanks of the society were extended to the retiring officers for their services during the past year. Adjourned.

W. F. BARBAT, Secretary.

San Diego County.

At the regular meeting of the San Diego County Medical Society, November 6, Dr. Robert Armstrong delivered a lecture on the subject of "Affections of the Nervous System Among English-speaking Peoples." He said in part:

Speaking of diseases of the nervous system as including all serious disturbances of the normal balance of the functions of the nervous system, varying from the strain of temporary overwork to those extreme disturbances resulting in the many forms of insanity and crime, it is pretty generally held that there has been of late an increasing prevalence of what might very well be called "diseases of civilization." The rapid and radical changes that have been brought about in methods of production and living, by the practical application of science, co-operation, improved instruments, the substitution of "brain for brawn," machinery for muscle, in doing the world's work, could hardly fail to produce an increasing tendency to the many forms of nerve and brain affections, too well known to physicians to require detailed description.

When scientific methods and machinery are applied so as to supply the markets with only, say, 10 per cent of the manual labor required by the old methods, the class who own the capital invested, and the machinery, have increased means and power to indulge their whims and

passions, and the better-paid class of workmen are, of course, likely to be close imitators of the extravagant habits of the wealthy, with an increase of all the well-known results of high living and self-indulgence.

The class of workers who tend the highly specialized machines, whose work consists usually in performing some very simple manual operation, which is repeated throughout the work day or night, with unvarying monotony, are more or less rapidly reduced to the position of automaton, with nerves, brain and muscles cultivated only in one direction, but mentally and physically atrophied in every other respect. Competition of capital compels the employment of the cheapest available labor, and, as a matter of course, women and children must take the place of men in all the simpler processes of production, because they work cheaper. That the women are soon physically, morally and mentally wrecks goes without saying. Under such conditions children, perhaps, suffer less, often never knowing any better; dwarfed, stupid, imbecile, death comes, it is said, to these in an average of four or five years of factory life.

The English-speaking people of the world have probably suffered relatively more from these new conditions, because they have been foremost in applying the new methods. Other nations, however, are rapidly taking the same direction, and as there is necessarily a limit to the foreign markets and the lands, some remedy must be found or civilization itself must suffer disaster.

Science has been applied in production; let science be applied in the distribution of the results arising from harnessing the forces of nature.

The hours of monotonous factory work must somehow be reduced, so that all the able-bodied workers will share the work and the profits, so that the women may do their proper work in the family and the home, and the children be allowed to develop normally in schools.

Referring to matters which perhaps do not directly concern the profession of medicine, a most serious source of worry, overwork, and all that accompanies these, is to be found in English orthography, which requires two years more of most unsatisfactory school work in learning to read and write badly than is required to learn these branches perfectly in the schools of France, Spain, Italy and other European countries. The failure of fifty years of "spelling reform" has been named as conclusive proof that improvement of English spelling is impossible. But it surely cannot be true that a race, the foremost in applying science in all other practical directions, cannot do as well as its less enterprising neighbors in this most important direction.

It can now be demonstrated beyond successful question that it is possible to do even better. In the past all alphabets have been entirely arbitrary in their sign structure. In this, as in other practical affairs, there is not likely to be any permanent rest until the best, the highest, attainable economy is reached; and the best possible can be attained only by the application of scientific or natural principles. This conceded, obviously the first step should be to find some satisfactory principle of alphabetic development, to serve as a graphic foundation.

It has been suggested that the best conceivable, the most natural standard of graphic sign requirement may be found in the simple principle of analogy between written signs and spoken sounds. Since these are analogous in function, why not make them analogous in character, by modeling alphabetic signs so as to correspond as closely as possible with the sounds they represent, in character, and hence in simplicity, order, and in all that is desirable in written or printed expression?

Dr. Armstrong then exhibited charts showing a proposed system of graphic signs, which he claimed most closely followed the sound elements they respectively represented. He suggested that experts in phonetics could perfect the system, which upon general adoption would save at least two years in the teaching and learning of common print.

THOS. L. MAGEE, Secretary.

Santa Barbara County.

The Santa Barbara County Medical Society held its regular monthly meeting in the parlor of the Arlington Hotel, November 11th. The president, Dr. Charles Anderson, being absent, Dr. C. E. Vaughan presided; the following members answered to roll call, viz: Drs. Wm. H. Flint, C. S. Stoddard, J. W. Graham, W. B. Cunnane and C. E. Vaughan; visitors, Drs. Barry, Conrad and Morrey.

Dr. W. B. Cunnane reported a case of Laparotomy, the unusual conditions found and the excellent result following operation.

Dr. Wm. H. Flint commented upon the good effect of the adrenal gland preparations, strychnin and normal salt solution toward bringing about a reaction.

The paper of the evening, "Asepsis by a Country Physician," with special reference to "Its Practice in Obstetrics," was read by Dr. J. W. Graham.

Dr. David A. Conrad was elected to membership in the association.

W. B. CUNNANE, M. D., Secretary.

Santa Clara County.

The principal matter of interest at the meeting held in October was the presentation of a paper by Dr. Paul Sanford entitled "Neuralgia and Some of Its Clinical Features." (Paper enclosed herewith). The author cited clinical cases of trifacial and intercostal neuralgia.

Dr. H. J. B. Wright reported a case of ptomaine poisoning in which the autopsy revealed no lesion of the abdominal viscera other than indications of gastritis. He requested an expression of opinion and the experience of those present on the subject.

Drs. F. H. Paterson, Frasse, Curnow, Witter and Grissim replied and cited recent cases which had come under their own care.

At the stated meeting of the Santa Clara Medical Society, held November 18, Dr. F. H. Paterson read a paper entitled "The Value of a Medical Laboratory," which was well received and elicited considerable comment.

J. LAMBERT ASAY, Secretary.

Sonoma County.

The first meeting of the Sonoma County Medical Society was held on the evening of November 12 in Eagle's Hall, Santa Rosa, about thirty members being present. The interest manifested was very great and betokens a most brilliant future for the society.

The address of the President, Dr. Shearer, of Santa Rosa, was listened to with rapt attention by the confreres of that "grand old man," who interspersed his address with stories of his experiences in Georgia in '64, and referred to what the profession then knew of sepsis. He was most eloquent in his references to the great work in the cause of humanity, and was heartily cheered at the conclusion of his address. Dr. Shearer is still in the foremost ranks of our profession, ready to learn as a child, ready to impart knowledge as the sage that he is. The society voted thanks for the paper, which was deposited with the secretary.

The next paper was by Dr. George Ivancovich, of Petaluma, on "Typhoid Fever." He handled his subject exceedingly well, and at its close a friendly but spirited discussion followed: Dr. A. M. Thomson, of Sonoma, on treatment; Dr. W. J. Kerr, of Sebastopol, on the use of acetozone as an intestinal antiseptic (gr. xxx. to qt. H O and use O iv. per day); Dr. J. H. McCord, of Santa Rosa, on the especial care of the kidneys; he also used acetozone as an intestinal antiseptic; he thought medicine in intestinal hemorrhage of little value. Dr. J. W. Jesse referred to his management of many cases with the loss of but one patient. Dr. Browne, of Healdsburg, and Dr. Bonar, of Santa Rosa also discussed the subject, the latter claiming there is no food to be absolutely relied upon, but that each case presented a law unto itself; he recommended fruit juices and buttermilk. Dr. Coffman, of Healdsburg, advised careful study of each case. Dr. Meneray, of Santa Rosa, reported fifteen cases and outlined his treatment; he gives little medicine, but twice a day uses high and low enema of cold water salt solution; matter as presented was both interesting and instructive. Dr. J. W. Seawell, of Healdsburg, gave an instructive talk on bacillus typhosis, explaining the difference between it and ba-

Escherichia coli communis, suggesting that a serum anti-toxin would soon be forthcoming that would stamp out the bacilli as effectually as does the diphtheritic serum stamp out the bacilli of Klebs-Loeffler. Dr. Barmore, of Santa Rosa, closed the discussion.

During a recess examination of bacillus typhosis was made with oil emersion lens brought to the meeting by Dr. Ivancovich.

Santa Rosa was chosen for the next meeting on December 10, and after discussion as to the eligibility of new members the meeting adjourned at 12:05.

It was once thought that we could not have a medical society in this county, but the meeting above reported demonstrates the fact of success and it was harmonious and enthusiastic.

G. W. MALLORY, Secretary.

Southern California Society.

The next meeting of the Southern California Medical Society will be held at Redlands December 2-3. The STATE JOURNAL has arranged to have the proceedings reported.

Ventura County.

Organized October 29th, 1908.

On the evening of the 29th of October, Drs. Love, Maulhardt, Stockwell, Dwire, Cunnane, Teubner and Broughton met the President of the State Society and Trustees Mattison Baird and Jones at the Rose Hotel, Ventura, and organized a county society, voting to affiliate with the State Society. Drs. Saeger, Hinckley and Huning, of Ventura county, could not be present at the meeting, but sent in their names with the request that they be enrolled as charter members. The local physicians had arranged for an excellent dinner to the delegation from the State Society, and after dinner the meeting was called to order by Dr. H. Bert Ellis, President of the State Society, and Dr. J. H. Love was elected temporary chairman, with Dr. Maulhardt as secretary. Dr. Philip Mills Jones then presented the constitution and by-laws recommended by the American Medical Association and by the Trustees of the State Society, and explained the plan of organization in detail. Dr. Broughton moved that the county society be organized and that the constitution and by-laws as read be adopted; these motions were carried. It was then moved and carried that the roster be left open till the 31st of January, so that all physicians of the county who might desire to do so might become charter members without the payment of an initiation fee. The following officers were then elected, to serve until the annual meeting in December: President, J. H. Love; Vice-president, G. A. Broughton; Secretary and Treasurer, A. A. Maulhardt. A resolution asking for affiliation with the State Society was introduced and passed. The first Monday at 8 p. m. of each month was made the time for the regular monthly meetings. The society then adjourned.

Thus another County Medical Society is added to the list, and the Trustees congratulate the physicians of Ventura upon the fact accomplished. We sincerely trust that the Ventura County Medical Society will thrive and grow strong and be an important factor in medical affairs of Ventura county. There are a few physicians in the county who have not yet signified their intention to join the society, and we would urge upon the members to see to it that every one of these is fully informed of what has been done and is invited to connect himself with the County, and thus also with the State Society. Whether they are likely to be able to attend meetings or not, they should join, for they will then be part of the great organization, will be a potent factor in all things of public health in the State, and will receive the

publications of the State Society free. As the reports of meetings are published in the STATE JOURNAL, all members will know what is going on whether they are present or not, and thus will be brought into closer touch, and kept in more intimate relations. The Trustees wish you every success.

California Academy of Medicine.

The regular meeting for October was called to order by the President, Dr. Montgomery, on the evening of the 23d. Dr. W. I. Terry exhibited a patient upon whom he performed complete extirpation of the larynx. The patient was presented to the Academy at the May meeting, at which time he exhibited a large epithelioma of the larynx, involving the vocal cords and the epiglottis. On May 7th he was operated upon, the tumor mass and the vocal cords being removed; subsequently more tumor masses appeared and he was again subjected to an operation, following which he was treated nine times by exposure to the X-rays. No improvement resulting, and the tumor mass increasing in size, a radical operation was decided upon and performed. A tube was inserted between the third and fourth tracheal rings and the anesthetic administered by its means without difficulty. The entire larynx was then removed, and the epiglottis was removed separately. There was very little hemorrhage; after the operation the respiration dropped to four per minute, due probably, as suggested by Dr. Terry, to the unusual amount of air entering the lungs after the removal of the obstruction which had maintained for some time preceding the operation. Two days after the operation he could drink water, and subsequently take soft food. Recovery was rapid and uneventful. He is now learning artificial articulation by means of a pitch pipe attached to a double tube, one end being inserted in the tracheal opening and the other held in the mouth. The present arrangement is temporary, but the patient has already learned the proper modulations of the pitch pipe and can make himself well understood. Dr. Terry thought the only mistake made was in refraining from performing the total extirpation at first.

Dr. Harry M. Sherman, who was to have reported a case of Marjolin's Ulcer, stated that he had not been able to have the necessary material sent to the place of meeting during the day and so would postpone that report until the next meeting, substituting for it, at the present meeting, the exhibition of a specimen of spinal tuberculosis. Deformity was very marked; laminectomy had been performed in order to relieve the paralysis. Following the operation there was slight improvement in sensation and motion, the child being able to cross one leg over the other, and some control of the vesical sphincter was secured. This improvement was considered very remarkable when the spine was examined post mortem and the cord was seen to be compressed and atrophied to a mere thread, the antero-posterior diameter of the canal at the angle being only 3-4 mm. That sensation and motion, even though in limited degree, could be transmitted through this mere trace of cord was rather remarkable. Dr. Sherman spoke of the fact that abscesses could and did exist when unsuspected, and called attention to the presence of one in the specimen exhibited, which had not been suspected at any time. Some general discussion followed as to the exact form of the Babinski reflex, indicating sclerosis of the lateral columns.

Dr. H. C. Moffit read a paper on "Recurrent Vomiting in Children," based largely on the report of several cases encountered by him. The first patient was seen on August 22d, and was the 11-year-old child of parents giving a bad nervous history. The first sickness of the child was due to bad milk and occurred

when about 6 years of age. The patient was rachitic but not notably nervous. School life was very greatly interfered with by the attacks of vomiting, which occurred two or three times a month, generally due to some excitement or overdoing. During the attacks there was lateral headache; mucus and bile were iterated, but no blood. Temperatures of 103°, 104° and 105° had been noted, and the skin was brown and itching during the attacks. No odor was noted. The urine, during the attacks, contained large amounts of indican and acetone, which were absent from the urine at other times. The second child had been unhealthy since birth; at the end of its first year it weighed but eight pounds. Attacks are similar to those of the first patient, but last from three to eight days. The bowels are always constipated, but the child shows no nervous temperament. The third patient had a negative history, and was a girl of three years. Attacks begin with great thirst and vomiting lasting from three to seven days. There is no fever, but there is always, during attacks, a heavy odor on the breath; no cause for the attacks can be ascertained. The diet is largely one of carbohydrates. The last attack was preceded by exposure to the sun, two days of fever and a temperature of 103° during the attack being noted. There was no thirst in this case, but the urine contained acetone and diacetic acid. An enema of sodium bicarbonate was given and the attack relieved in about a half hour, when the acetone disappeared from the urine. Dr. Moffit then referred to the cases reported by Edsol in the *American Journal Medical Science*, April. The symptoms in most cases are alike; the temperature may run from 103° to 107°; the skin becomes either yellow or brown; the bowels have no effect, and pain is generally absent. As these patients grow older they develop migraine, as a rule. Death may occur during or at the end of an attack, probably from exhaustion. As a rule there is a decidedly neurotic history. The attacks seem to be due to acid intoxication, and in five out of six patients acetone was found in the urine, only during attacks.

The third child was a girl of three years, with a family history of gout and tuberculosis. She was well until six months old, when an illness was induced by bad milk. There is a decidedly nervous temperament and attacks occur every two or three months. She is markedly constipated before attacks, and the temperature during them ranges from 102° to 107°. There is a marked heavy odor on the breath, somewhat resembling the odor of sardines. Thirst is marked. The attacks are generally similar to the others cited, and during them acetone and diacetic acid are found in the urine. In all of these patients large amounts of sodium bicarbonate given by enema relieved the severity of the attack and caused the acetone and excess of acid to cease to appear in the urine.

Dr. Philip K. Brown, in discussing the paper of Dr. Moffit, said that he had seen a number of patients suffering from these recurrent attacks. He thought intestinal disturbance with autointoxication was largely a causative factor, and doubted that the presence of acetone in the urine had much to do with it. Acetone is difficult to find in the urine, but diacetic acid is easy, and indicates the acidity of the urine. It should be a routine procedure to look after diacetic acid in these cases. Many of them vomit as often as every ten minutes and may keep it up for hours at a time. Bicarbonate of soda certainly relieves most of them, and large quantities of it may be given by the rectum, the buttocks being held forcibly together in order to secure its retention.

Dr. C. Quinan said that Leyden, in 1882, was the first to write of this form of vomiting. He outlined the literature on the subject and expressed the opin-

ion that it is impossible to develop the pathology of the condition from the published text books or other literature on the subject. He thought some changes in the pancreatic digestion, or the proper secretions of the various elements of the digestive system might be largely at fault in the causation these attacks of vomiting. Acetone is an aldehyde of alcohol from glycerin, and is mostly a derivative of fats; if the fats are cut out of the diet much help might be gained. He doubted the action of sodium bicarbonate in neutralizing the acidity. The nervous element in the attacks he considered of the first importance, and thought that potassium bromid in the intervals and some of the coal tar depressants during the attacks would largely control these conditions.

Dr. W. W. Kerr mentioned the occurrence of this condition in a patient recently seen by him, the symptoms and general condition being practically the same as those described in the other cases reported. The child is old-mannish in his eating and general habits and there is no constipation nor gastric disturbance. The attacks seem to be always preceded by some nerve excitement. He saw the patient on the fifth day; the bowels had already been well cleared, there was no odor and only slightly acid urine; the urine was not examined for acetone. The attacks commenced shortly after the boy commenced going to school and seemed to be started by the forced brain activity at that time. Forty grains of bromid, given by the rectum and retained by holding the buttocks together, followed by 20 grains every two hours, terminated the attack. Bromid has been administered ever since and there has been no attack since that time, four months having now elapsed. Acetone may have something to do with the attacks, but acidity of the urine is not found in every case. The cause was originally assigned to uric acid, but now that has been abandoned and we are as much at sea as to the causation as ever. The pathology is very unsatisfactory.

Dr. Howard Morrow recounted the history of this disturbance in a patient of his, and stated that cutting out the acid producing elements of the diet had a negative result. As the patient grows older the attacks become less frequent and will probably disappear.

Dr. Sherman asked whether the attacks seemed to tend to self-limitation; whether the patients got better as they grew older. The general opinion seemed to be that this was the case and that migraine often appeared later in life, after the attacks of vomiting had disappeared.

Dr. Brown said that the alkaline treatment certainly produced results that other treatments did not, and in support of the statement said that one patient of his who had frequent and severe attacks lasting as a rule about a week in spite of every treatment, had his last attack limited to three hours by the use of sodium bicarbonate, per rectum. He had tried the treatment recommended by Dr. Quinan and found it unsatisfactory. The cause might be as suggested by Dr. Quinan, but the treatment, in his opinion, was the employment of alkaline enemas.

Dr. George H. Evans said that these patients, as they grew older, developed migraine and ceased to have the vomiting attacks. This, in his opinion, was a clear indication of the nervous element in the causation of the trouble.

Dr. Sherman referred to a boy who had had what was called psychic vomiting and had been seen by a number of physicians. The attacks continued in spite of everything, and later a pain in the side was noted. Appendiceal trouble was diagnosed and about a year ago he was operated upon; since then he has been entirely well.

(Continued on page 418.)

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PHARMACY.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.

Adeps lane hydrosus	{ Anasalpin Lanolin Lanum Argentum Crede Collargol Colloidal silver Benz-o-naphthol Benzoyl-beta-naphthol	Phenylacetamide	{ Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Argentum Colloidale	{ Betol Naphthal Naphthosalol Salinaptol	Phenylmethyl-ketone	{ Acetophenone Hypnone
Beta-naphthol benzoate	{ Antisepsin Asepsin	Plant pepsin	{ Papain Papoid Papayotin Caroid
Beta-naphthol Salicylate	{ Airol Airogen Airiform	Salicylic acid ester of quinine	{ Salochinin Saloquinin
Bromacetanilid	{ Abrastol Asaprol	Salicylate of Salochinin	Rheumatin
Bismuth-iodo-subgallate	{ Dormiol Amylene-chloral	Sodium sulpho-caffeate	{ Nasrol Symphoral
Calcium beta-naphthol sulphonate	{ Aristol Annidalin	Thyroid gland, dried lactose trituration	{ Iodothyrine Thyroidin
Dimethyl - ethyl - carbinol chloral	{ Di Thymol Iodid Di Iodo Dithymol (And several other similar names.)	Trioxymethylene	{ Paraformaldehyde Paraform Triformol
Dithymol Diiodid	{ Antidorin Ethylol Kelen Mono-chlor-ethane	Acetyl-salicylic acid = Aspirin	
Ethyl chlorid	{ Aminoform Ammonio-formaldehyde	Aluminum aceto-tartrate = Alsol	
Hexamethylene-tetramine ...	{ Cystogen Formin Saliformin Urotropin Helmitol	Australian oil Eucalyptus = Flucol	
", anhydromethylen citrate.	{ *Benzanalgene	Bismuth chrysophanat = Dermol	
Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin	{ *Analgen	Bismuth phosphate (soluble) = Bisol	
Paraphenetin carbamid	{ *Quinalgen	Bismuth pyrogallate = Heicosol	
Phenyl-dimethyl-parazolon. (Germ. Pharm.)	{ Dulcin Sucrol Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan Phenazon (B. P.)	Bismuth subgallate = Dermatol	
	{ Phenylon Pyrazin Pyrazolin Parodyn Salazolon Sedatin	Bismuth beta-naphtholate = Orphal	
		Calcium permanganate = Acerol	
		Calcium salicylate = Colchicin	
		Catarin hydrochlorid = Stypticin	
		Chloreton, 1% solution = Aneson	
		Creosote carbonat = Creosotal	
		Diethylen-diamin = Piperazin	
		Guaiacol carbonate = Duotal	
		Magnesium dioxid = Biogen	
		Oxyquinaseptol = Diaphtherin	
		Phenyl-ethyl urethan = Euphorin	
		Saccharin = Garanotose	
		Subgallate of bismuth = Dermatol	
		Sodium chlorate = Oxychlorine	
		Sodium beta-naphtholate = Microcidin	
		Tang-Kui, Fl. extract = Eumenol	
		Trichloracetic acid, 50% solution = Acetocautic	

*Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

A Valuable Hypnotic.—Dr. Roberts Bartholow, in the *New York Medical Journal*, comments on a new hypnotic of rather unusually good recommendations. Chemically it is diethylmalonyurea and has been given the name (not controlled) of veronal. "In many of its properties it resembles trional and all the evidence shows that it effects its work without changing the character of the blood or causing any disturbance of the respiratory function." It may be used alone in doses of a half to one grammie, or, and this Dr. Bartholow recommends, in combination with one-third trional. He recommends that its administration be commenced with an initial dose of ten grains veronal to five of trional, continuing with smaller doses when the cumulative action is manifest. It certainly is refreshing to find an uncontrolled remedy that seems to have proper professional support and about which something may be said without fearing the accusation of having ulterior motives of a distinctly commercial character.

PROPOSED CHANGE OF CONSTITUTION.

The following is, in part, the report of the special committee appointed at the last annual meeting of the State Society to reconstruct the Constitution and By-Laws in conformity with the recommendation made by the American Medical Association.

CONSTITUTION.

ARTICLE I.

NAME AND OBJECTS.

SECTION 1. The name of this Society shall be the "Medical Society of the State of California."

SEC. 2. The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of California, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE II.

COMPONENT SOCIETIES.

Component Societies shall consist of those county medical societies which hold charters from this Society.

ARTICLE III.

COMPOSITION OF THE SOCIETY.

SECTION 1. This Society shall consist of Members, Delegates and Guests.

SEC. 2. Members—The Members of the Society shall be the members of the component county medical societies.

SEC. 3. Delegates—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Society.

SEC. 4. Guests—Any distinguished scientist, or any physician not a resident of this State, may become a guest during any Annual Session on invitation of the President or the officers of this Society, and shall be accorded the privilege of participating in all of the scientific work for that Session. The President shall announce to the general meeting the names of such persons as have been invited to attend the meeting, and their names shall then be enrolled as guests of that annual meeting.

SEC. 5. At the expiration of one year from the date of the adoption of this Constitution and By-Laws, those "members at large" and "permanent" members who have not become members of a component society shall be dropped from the roll of members of this Society. All members at large at the time of the adoption of this Constitution and By-Laws, shall pay to the Secretary within thirty days the sum of three dollars (\$3.00), dues for the current year. At the expiration of thirty days the Secretary shall send by registered mail to each member of this class, whose dues remain unpaid, at his last known address, a second bill for the amount due, and if such accounts shall remain unpaid at the end of the second thirty

days, such names shall be dropped from the roll of members. This section shall cease to be a part of the Constitution without further action at the expiration of one year from the date of its adoption.

ARTICLE IV.

HOUSE OF DELEGATES.

The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) Delegates elected by the component county societies, (2) the Councilors, and (3), *ex-officio*, the President and Secretary of this Society.

ARTICLE V.

MEETINGS.

SECTION 1. The regular meetings of this Society shall be held annually.

SEC. 2. Special meetings of the House of Delegates may be convened as the By-Laws provide.

SEC. 3. Twenty-five members shall constitute a quorum in the House of Delegates.

ARTICLE VI.

OFFICERS.

SECTION 1. The officers of this Society shall be a President, a First Vice-President, a Second Vice-President, a Secretary, two assistant Secretaries, a Treasurer, five members of the Board of Medical Examiners and three Alternates, and twelve Councilors, of whom one shall be elected from each of the nine councilor districts and three at large. Not more than three Councilors shall be elected from any one councilor district. These officers shall be elected by the House of Delegates at the time and in the manner duly provided in this Constitution and By-Laws.

SEC. 2. The officers, except the Councilors, shall be elected annually. The terms of the elected Councilors shall be for three years, those first elected serving one, two and three years, as may be arranged. All of these officers shall serve until their successors are elected and qualified.

SEC. 3. No Delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance upon that Annual Session and who has not been a member of the Society for the past two years.

ARTICLE VII.

COUNCIL.

The Council shall consist of the Councilors, and the President and Secretary, *ex-officio*. Besides its duties mentioned in the By-Laws, it shall constitute the Finance Committee of the House of Delegates. Five Councilors shall constitute a quorum.

ARTICLE VIII.

SECTION AND DISTRICT SOCIETIES.

The House of Delegates may provide for a division of the scientific work of the Society into appropriate Sections, and for the organization of such District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE IX.

RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES.

In order to broaden professional fellowship this Society is ready to arrange with other State Medical Associations for an interchange of certificates of membership, so that members moving from one state to another may avoid the formality of re-election.

ARTICLE X.

FUNDS AND EXPENSES.

Funds shall be raised by an equal per capita assess-

ment on each component society. The amount of the assessment shall be fixed by the House of Delegates, but shall not exceed the sum of \$2.00 per capita per annum, except on a four-fifths vote of the Delegates. Funds may also be raised by voluntary contributions from the Society's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Society, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be referred to the Finance Committee before action is taken thereon.

ARTICLE XI.

REFERENDUM.

SECTION 1. A general meeting of the Society may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Society, who may vote by mail or in person, and, if the members voting shall comprise a majority of all the members of the Society, a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2. The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XII.

THE SEAL.

The Society shall have a common seal, with power to break, change or renew the same at pleasure.

ARTICLE XIII.

AMENDMENTS.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been published twice during the year in the Journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

BY-LAWS.

ARTICLE I.

MEMBERSHIP.

SECTION 1. All members of affiliated County Medical Societies shall, by virtue of such membership, be members of this Society, when duly reported by the President and Secretary of the County Medical Society. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Society.

SEC. 2. Any person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take part in any of its proceedings, nor receive its publications, until he has been relieved of such disability. Any person who may be suspended for non-payment of dues is to be construed as coming within the provisions of this section.

SEC. 3. It shall be the duty of the President and Secretary of each component society to furnish the Secretary of this Society with a correct list of its members, with addresses, at least one month prior to each annual meeting.

SEC. 4. Any physician residing in a county in

which there is no county medical society in affiliation with this Society, may make application for membership to the county society of the county nearest to that in which he resides, or to that adjoining county society which he could most conveniently attend.

SEC. 5. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

SEC. 6. Honorary members are such distinguished persons as this Society may deem worthy of the compliment, and, after nomination in writing by three members, they may be elected to membership by the House of Delegates at any regular meeting. Their privileges shall be to take part in the scientific sessions and to receive programs and publications.

(To be continued next month.)

MEDICAL SOCIETY MEETINGS, (Continued.)

(From page 415.)

Dr. Moffit, in closing the discussion, said that all the conditions noted, temperature, vomiting, acetone and diacetic acid in the urine, etc., were undoubtedly not causes but results. The affection is one of a group of little understood neuroses and undoubtedly its principal cause was nerve disturbance of some sort. He thought the element of abdominal pain or of migraine might alternate with vomiting, and that probably many cases of appendicitis were really disturbances of this sort.

Dr. Kerr exhibited the pathological specimens taken at post mortem from the patient with Hodgkin's disease exhibited at the Academy in September and published in the report. (See JOURNAL, page 339.) Enormously enlarged glands were found associated with all the organs, the retroperitoneal glands seemingly more massive than others.

Toy Pistol Resolutions.—At the 29th Annual Session of the Mississippi Valley Medical Association, held at Memphis, October 7-9, the following resolutions were adopted:

"In view of the fact that more than 400 deaths from tetanus occurred following the 4th of July celebration of 1903, the great majority of which might have been prevented had proper precautions been taken; therefore,

"Be it Resolved, That the conclusions which follow, as offered by Dr. Stanton in a paper presented before the Association at the above meeting, be endorsed as the sense of the Association; and further

"Be it Resolved, That the Secretary be instructed to forward a copy of these resolutions and conclusions to the Medical Press, Associated Press, and the Secretaries of the several State Medical Societies with the request that they publish the same and take suitable action thereon.

"1. Enforcement of existing laws regarding the sale of toy pistols and other dangerous toys. 2. Enactment of laws by the nation, states and municipalities prohibiting the manufacture and sale of toy pistols, blank cartridges, dynamite canes and caps, cannon crackers, etc. 3. Open treatment of all wounds, however insignificant, in which from the nature or environment there is any risk of tetanus. 4. Immediate use of tetanus antitoxin in all cases of Fourth-of-July wounds, or wounds received in barnyards, gardens, or other places where tetanus infection is likely to occur. 5. As a forlorn hope, the injection of tetanus antitoxin after tetanus symptoms have appeared."

An International Sanitary Congress for the Adoption of Means of Defense against Cholera and the Plague opened at Paris on October 10. Representatives of twenty-five powers were present.

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52 PAGES

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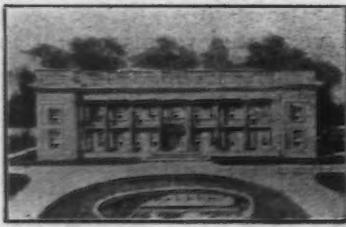
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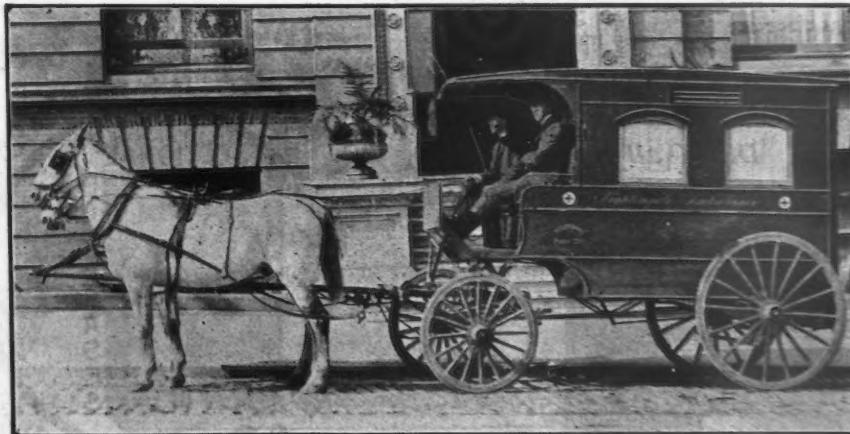
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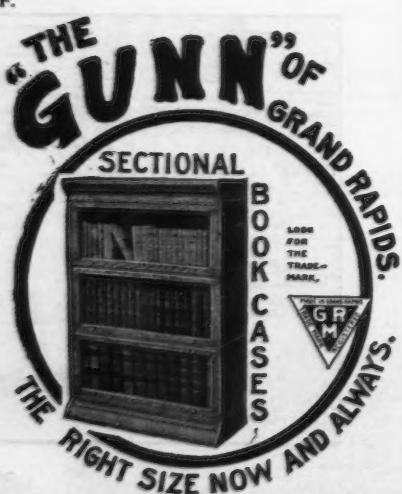
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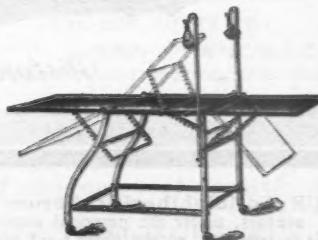
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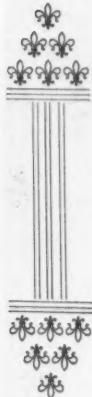
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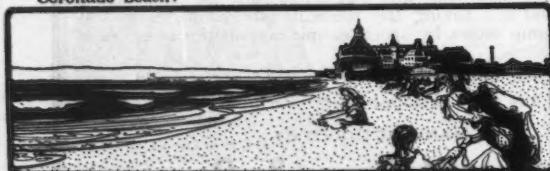
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